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U. S. DEPARTMENT OF AGRICULTURE  
OFFICE OF EXPERIMENT STATIONS

A. W. HARRIS, DIRECTOR

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EXPERIMENT STATION BULLETIN No. 12

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ORGANIZATION LISTS

OF THE

AGRICULTURAL EXPERIMENT STATIONS

AND

AGRICULTURAL SCHOOLS AND COLLEGES

IN THE

UNITED STATES

---

JUNE, 1892

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WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1892



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## THE AGRICULTURAL EXPERIMENT STATIONS.

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LETTER OF TRANSMITTAL.

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U. S. DEPARTMENT OF AGRICULTURE,  
OFFICE OF EXPERIMENT STATIONS,  
*Washington, D. C., March 18, 1892.*

SIR: I have the honor to transmit herewith, for publication, Experiment Station Bulletin No. 12 of this Office.

Respectfully,

A. W. HARRIS,  
*Director.*

Hon. J. M. RUSK,  
*Secretary of Agriculture.*

## LIST OF ABBREVIATIONS.

---

### A.

*Acad.*, Academy.  
*Acc.*, Accounts, Accountant.  
*Act.*, Acting.  
*Adj.*, Adjunct.  
*Ag.*, Agriculture, Agriculturist, Agricultural.  
*Agt.*, Agent.  
*Am.*, American.  
*An.*, Analytical.  
*Anat.*, Anatomy.  
*Anc.*, Ancient.  
*App.*, Applied.  
*Arbor.*, Arboriculture, Arboriculturist.  
*Archæ.*, Archæology.  
*Artill.*, Artillery.  
*Assoc.*, Associate.  
*Asst.*, Assistant.  
*Astr.*, Astronomy.

### B.

*Bact.*, Bacteriology, Bacteriologist.  
*Bd.*, Board.  
*Biol.*, Biology, Biologist.  
*Bot.*, Botany, Botanist, Botanical.

### C.

*Ch.*, Chemist, Chemistry.  
*Chair.*, Chairman.  
*Chanc.*, Chancellor.  
*Civ.*, Civil.  
*Cl.*, Clerk.  
*Clas.*, Classical.  
*Coll.*, College.  
*Com.*, Commission, Commissioner, Common.  
*Comp.*, Comparative, Composition.  
*Comt.*, Commandant.  
*Crypt.*, Cryptogamic.  
*Cur.*, Curator.

### D.

*Dept.*, Department.  
*Dir.*, Director.  
*Disb.*, Disbursing.  
*Div.*, Division.  
*Dom.*, Domestic.

### E.

*Econ.*, Economy, Economic.  
*Elec.*, Electrical.  
*Eloc.*, Elocution.  
*Em.*, Emeritus.  
*Engin.*, Engineer, Engineering.  
*Engl.*, English.  
*Ent.*, Entomology, Entomologist.  
*Eq.*, Equity.  
*Eth.*, Ethics.  
*Expt.*, Experiment.

### F.

*Fac.*, Faculty.  
*Flor.*, Floriculture, Floriculturist.  
*For.*, Foreman.  
*Fr.*, French.

### G.

*Gen.*, General.  
*Geog.*, Geography.  
*Geol.*, Geology, Geologist, Geological.  
*Ger.*, German.  
*Gov.*, Governor, Governing.  
*Gram.*, Grammar.  
*Gym.*, Gymnasium.

### H.

*Herds.*, Herdsman.  
*Hist.*, History.  
*Histol.*, Histology.  
*Hort.*, Horticulture, Horticulturist.  
*Hyg.*, Hygiene.

### I.

*Imp.*, Imperial.  
*Ind.*, Industry, Industrial  
*Inf.*, Infantry.  
*Insp.*, Inspector.  
*Instr.*, Instructor.  
*Insti.*, Institute.  
*Instru.*, Instrumental.  
*Intel.*, Intellectual.  
*Irr.*, Irrigation.

## J.

*Jan.*, Janitor.  
*Juris.*, Jurisprudence.

## L.

*Lab.*, Laboratory.  
*Lan.*, Language.  
*Lands. Gard.*, Landscape gardening.  
*Lat.*, Latin.  
*Lect.*, Lecture, Lecturer.  
*Lib.*, Librarian.  
*Lic.*, Licentiate.  
*Lit.*, Literature.  
*Log.*, Logic.

## M.

*Mach.*, Machinist.  
*Man.*, Manual.  
*Mangr.*, Manager.  
*Mat.*, Matron.  
*Math.*, Mathematics.  
*Mech.*, Mechanics, Mechanical.  
*Med.*, Medicine, Medical.  
*Men.*, Mental.  
*Met.*, Meteorology, Meteorologist.  
*Meta.*, Metaphysics.  
*Metal.*, Metallurgy.  
*Micr.*, Microscopists, Microscopy.  
*Mil.*, Military.  
*Min.*, Mineralogy, Mineralogist.  
*Mod.*, Modern.  
*Mor.*, Moral.  
*Mus.*, Museum.  
*Myc.*, Mycology, Mycologist.

## N.

*Nat. Hist.*, Natural history.  
*Nor.*, Normal.

## O.

*Org.*, Organic.

## P.

*Pal.*, Paleontology, Paleontologist.  
*Pathol.*, Pathology.  
*Ped.*, Pedagogy, Pedagogics.  
*Pen.*, Penmanship.  
*P. g.*, Post Graduate.  
*Ph.*, Philosophy.  
*Phar.*, Pharmacy.  
*Philol.*, Philology.

*Phys.*, Physics, Physicist, Physical.  
*Physiol.*, Physiology, Physiologist.  
*Pol.*, Political.  
*Poly.*, Polytechnic.  
*Precep.*, Preceptress.  
*Prep.*, Preparatory.  
*Pres.*, President.  
*Prin.*, Principal.  
*Prof.*, Professor.  
*Psychol.*, Psychology.

## R.

*Rhet.*, Rhetoric.

## S.

*Sch.*, School.  
*Sci.*, Science, Scientific, Scientist.  
*Sec.*, Secretary.  
*Soc.*, Social.  
*Sp.*, Special.  
*St.*, State.  
*Sta.*, Station.  
*Sten.*, Stenographer, Stenography.  
*Sum.*, Summer.  
*Supt.*, Superintendent.  
*Sur.*, Survey.  
*Surg.*, Surgery, Surgeon.

## T.

*Tac.*, Tactics, Tactician.  
*Tech.*, Technology.  
*Teleg.*, Telegraphy.  
*Thera.*, Therapeutics.  
*Tox.*, Toxicology.  
*Train.*, Training.  
*Treas.*, Treasurer.

## U.

*Univ.*, University.

## V.

*V. Dir.*, Vice Director.  
*Vet.*, Veterinary, Veterinarian.  
*Vit.*, Viticulture, Viticulturist.  
*Voc.*, Vocal.

## Z.

*Zoöl.*, Zoölogy, Zoölogist.



LIST OF EXPERIMENT STATIONS IN THE UNITED STATES, WITH GOV-  
ERNING BOARDS AND STATION STAFFS.

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**Agricultural Experiment Station of the Agricultural and Mechanical College  
of Alabama, Auburn.**

Department of the Agricultural and Mechanical College of Alabama.

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Department of Florida State Agricultural and Mechanical College.

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### NORTH DAKOTA.

**North Dakota Agricultural Experiment Station, Fargo.**

Department of North Dakota Agricultural College.

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Department of Oklahoma Agricultural College.

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\* Station address after Sept. 1, 1892, *Wooster*.

## OREGON.

**Oregon Experiment Station, Corvallis.**

Department of Oregon State Agricultural College.

## GOVERNING BOARD.

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## PENNSYLVANIA.

**The Pennsylvania State College Agricultural Experiment Station, State College.**

Department of the Pennsylvania State College.

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## STATION STAFF.

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## RHODE ISLAND.

**Rhode Island State Agricultural Experiment Station, Kingston.**

Department of Rhode Island College of Agriculture and Mechanic Arts.

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## STATION STAFF.

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Charles O. Flagg, B. S., *Dir. and Ag.*; L. F. Kinney, B. S., *Hort.*; H. J. Wheeler, M. A.,

Ph. D., *Ch.*; Samuel Cushman, *Apiarist and Poultry Manager*; F. E. Rice, M. D., M. R. C. V. S., *Vet.*; J. D. Towar, B. S., *Asst. Ag.*; B. L. Hartwell, B. S., *Asst. Ch.*; H. F. Adams, *Farmer*; Miss A. R. French, *Cl.*

## SOUTH CAROLINA.

**South Carolina Agricultural Experiment Station, Fort Hill.\***

Department of Clemson Agricultural College.

### GOVERNING BOARD.

R. W. Simpson (*Pres.*), *Pendleton*; D. K. Norris, *Hickory Flat*; M. L. Donaldson, *Greenrille*; R. E. Bowen, *Briggs*; Jesse H. Hardin, *Chester*; Gov. B. R. Tillman, *Columbia*; J. E. Bradley, *Hunters*; E. T. Stackhouse, *Little Rock*; J. E. Tindal, *Columbia*; Alan Johnstone, *Newberry*; J. E. Wannamaker, *St. Matthews*; Jas. L. Orr, *Greenville*; D. T. Redfearn, *Mt. Croghan*.

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## SOUTH DAKOTA.

**South Dakota Agricultural Experiment Station, Brookings.**

Department of South Dakota Agricultural College.

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## TENNESSEE.

**Tennessee Agricultural Experiment Station, Knoxville.**

Department of the University of Tennessee.

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\* Telegraph address, *Pendleton*; express and freight address, *Calhoun Station*.

C. Deaderick, M. D., *Knoxville*; John M. Boyd, M. D., *Knoxville*; George Brown, *Knoxville*; J. W. Gaut, *Knoxville*; Samuel J. McKinney, *Knoxville*; Moses White, *Knoxville*; Samuel B. Luttrell, *Knoxville*; John M. Fleming, *Knoxville*.

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**Texas Agricultural Experiment Station, College Station.**

Department of the Agricultural and Mechanical College of Texas.

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#### STATION STAFF.

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### UTAH.

**Agricultural Experiment Station of Utah, Logan.**

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### VERMONT.

**State Agricultural Experiment Station, Burlington.**

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Department of West Virginia University.

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\* Express and freight address, *Christiansburg*.

## WISCONSIN.

**Agricultural Experiment Station of the University of Wisconsin, *Madison*.**

Department of University of Wisconsin.

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Table showing experiment station officers engaged in principal lines of work.

| State.                | Location.         | Agriculturists.                       | Botanists.                              | Chemists.                                                                                                                | Entomologists.                           | Horticulturists.                | Meteorologists.  | Veterinarians.                    | Miscellaneous.                             |
|-----------------------|-------------------|---------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------|------------------|-----------------------------------|--------------------------------------------|
| Alabama (College).    | Auburn.....       | A. J. Bondurant.<br>J. Clayton .....  | P. H. Mell.....                         | N. T. Lupton.<br>J. T. Anderson.<br>L. W. Wilkinson.                                                                     |                                          |                                 | P. H. Mell.....  | C. A. Cary.....                   | G. F. Atkinson<br>( <i>Biol.</i> ).        |
| Alabama (Canebrake).  | Uniontown.....    |                                       |                                         |                                                                                                                          |                                          |                                 |                  | T. J. Kean.....                   |                                            |
| Arizona.....          | Tucson.....       |                                       | J. W. Tonney.....                       | C. B. Collingwood<br>J. A. Heberly.....                                                                                  | J. W. Tonney.....                        | L. E. Benton<br>M. Walker.....  | V. E. Stolbrand. |                                   | V. E. Stolbrand<br>( <i>Irr. Engin.</i> ). |
| Arkansas.....         | Fayetteville..... | C. L. Newman<br>Geo. B. Irby.....     |                                         | G. L. Teller<br>F. W. Killen.                                                                                            |                                          | J. T. Stinson.....              |                  | R. R. Dinwiddie.                  |                                            |
| California.....       | Berkeley.....     | E. J. Wickson.....                    | E. L. Green.....                        | E. W. Hilgard.....                                                                                                       | C. W. Woodworth.                         |                                 |                  |                                   | L. Paparelli<br>( <i>Vit.</i> ).           |
|                       |                   | M. E. Jaffa.....                      |                                         | R. H. Longbridge<br>G. E. Colby.                                                                                         |                                          |                                 |                  |                                   | R. H. Longbridge<br>( <i>Geol.</i> ).      |
| Colorado.....         | Fort Collins..... | W. J. Quick.....                      | C. S. Crandall.....                     | D. O'Brine.....                                                                                                          | C. P. Gillette.....                      | C. S. Crandall.....             | L. G. Carpenter  |                                   | L. G. Carpenter<br>( <i>Irr. Engin.</i> ). |
|                       |                   | F. A. Huntley.....                    |                                         |                                                                                                                          |                                          | C. M. Brose.....                | R. E. Trumble.   |                                   | J. D. Starnard<br>( <i>Irr. Engin.</i> ).  |
| Connecticut (State).  | New Haven.....    |                                       |                                         | E. H. Jenkins.<br>A. L. Winton, jr.<br>T. B. Osborne.<br>A. W. Ogden.<br>C. L. Voorhees.<br>C. D. Woods.<br>H. M. Smith. |                                          |                                 |                  | W. C. Sturgis<br>( <i>Mye.</i> ). |                                            |
|                       |                   |                                       |                                         | C. L. Penny.....                                                                                                         | M. H. Beekwith                           | M. H. Beekwith                  | W. H. Bishop.    |                                   |                                            |
| Connecticut (Storrs). | Storrs.....       | C. S. Phelps<br>E. A. Bailey.....     |                                         | J. M. Pickell<br>J. J. Earle.                                                                                            | P. H. Rolfs.....                         | J. K. Fitzgerald                |                  | A. W. Bitting.                    |                                            |
| Delaware.....         | Newark.....       |                                       | F. D. Chester.....                      |                                                                                                                          |                                          |                                 |                  |                                   |                                            |
| Florida.....          | Lake City.....    |                                       | P. H. Rolfs.....                        |                                                                                                                          |                                          |                                 |                  |                                   |                                            |
| Georgia.....          | Experiment.....   | J. M. Kimbrough                       |                                         | R. E. Hardee<br>H. C. White.                                                                                             |                                          | G. Speth.....                   | R. E. Hardee.    |                                   | H. J. Wing<br>( <i>Dairying.</i> ).        |
| Illinois.....         | Champaign.....    | F. D. Gardner.....                    | G. P. Clinton.....                      | E. H. Farrington<br>E. K. Nelson.....                                                                                    | S. A. Forbes.....                        | T. J. Burrill<br>G. W. McCluer. |                  | D. McIntosh.                      |                                            |
| Indiana.....          | La Fayette.....   | W. C. Latta.....                      | J. C. Arthur<br>K. Golden.....          | H. A. Huston.....                                                                                                        |                                          | J. Troop.....                   |                  | W. L. Williams.                   |                                            |
| Iowa.....             | Ames.....         | D. A. Kent.....                       | L. H. Pammel.....                       | G. E. Patrick.....<br>E. N. Eaton.....                                                                                   | H. Osborn.....<br>H. A. Gossard.....     | J. L. Budd.....                 |                  | M. Stalker.<br>W. R. Niles.       |                                            |
| Kansas.....           | Manhattan.....    | C. C. Georgeson.<br>F. C. Burtis..... | A. S. Hitchcock.<br>M. A. Carleton..... | G. H. Failer.....<br>J. T. Willard.....                                                                                  | E. A. Popenoe.....<br>F. A. Marlatt..... | E. A. Popenoe.<br>S. C. Mason.  |                  | N. S. Mayo.                       |                                            |

Table showing experiment station officers engaged in principal lines of work—Continued.

| State.                    | Location.                              | Agriculturists.                      | Botanists.                         | Chemists.                                                                                                   | Entomologists.                     | Horticulturists.                            | Meteorologists.  | Veterinarians.        | Miscellaneous.                        |
|---------------------------|----------------------------------------|--------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------|------------------|-----------------------|---------------------------------------|
| Kentucky .....            | Lexington .....                        | .....                                | H. Garman<br>J. S. Terrell .....   | M. A. Scovell ..<br>A. M. Peter ....<br>H. E. Curtis ..<br>J. T. Crawley ..                                 | H. Garman ..<br>J. S. Terrell ..   | C. W. Mathews ..                            | .....            | S. E. Bennett.        |                                       |
| Louisiana (Sugar)         | A u d u b o n<br>Park, New<br>Orleans. | .....                                | .....                              | H. E. L. Horton ..<br>J. T. Crawley ..                                                                      | .....                              | .....                                       | .....            | W. H. Dalrym-<br>ple. |                                       |
| Louisiana (State)         | Baton Rouge ..                         | .....                                | A. T. Prescott ..                  | B. B. Ross ..<br>R. E. Blouin.<br>Maurice Bird ..                                                           | H. A. Morgan ..                    | H. A. Morgan ..                             | .....            | .....                 |                                       |
| Louisiana (North)         | Calhoun .....                          | .....                                | .....                              | .....                                                                                                       | .....                              | .....                                       | .....            | .....                 |                                       |
| Maine .....               | Orono .....                            | W. Valentine ..                      | F. L. Harvey ..<br>F. P. Briggs .. | J. M. Bartlett ..<br>L. H. Merrill ..                                                                       | F. L. Harvey ..<br>F. P. Briggs .. | W. M. Munson ..                             | M. C. Fernald .. | F. L. Russell.        |                                       |
| Maryland .....            | College Park ..                        | A. I. Hayward ..                     | .....                              | H. J. Patterson ..                                                                                          | .....                              | T. L. Brunk ..                              | .....            | .....                 | Milton Whit-<br>ney ( <i>Phys.</i> ). |
| Massachusetts<br>(Hatch). | Amherst .....                          | W. P. Brooks ..<br>H. J. Field ..... | .....                              | .....                                                                                                       | C. H. Fernald ..                   | S. T. Maynard ..<br>W. H. Shep-ard-<br>son. | C. D. Warner ..  | .....                 | J. E. Humphrey,<br>( <i>Myc.</i> ).   |
| Massachusetts<br>(State). | Amherst .....                          | .....                                | .....                              | C. A. Goessmann<br>R. B. Moore.<br>C. S. Crocker.<br>H. D. Haskins ..<br>C. H. Jones ..<br>C. H. Johnson .. | .....                              | .....                                       | .....            | .....                 |                                       |
| Michigan .....            | Agricultural<br>College.               | E. A. Burnett ..                     | .....                              | R. C. Kedzie ..                                                                                             | .....                              | L. R. Taft .....                            | .....            | E. A. A. Grange.      | G. C. Davis<br>( <i>Biol.</i> ).      |
| Minnesota .....           | St. Anthony<br>Park.                   | P. G. Holden ..                      | C. F. Wheeler ..                   | W. L. Rossmann<br>H. E. Harrison.<br>H. Snyder .....                                                        | .....                              | H. P. Gladden.<br>S. B. Green.              | .....            | .....                 |                                       |
| Mississippi .....         | Agricultural<br>College.               | E. R. Lloyd .....                    | J. M. White ..                     | W. L. Hutchinson<br>L. G. Patterson.                                                                        | H. E. Weed ..                      | A. B. McKay ..                              | .....            | Tait Butler.          |                                       |
| Missouri .....            | Columbia .....                         | .....                                | .....                              | P. Schweitzer ..<br>C. P. Fox .....                                                                         | C. A. Keffler ..                   | C. A. Keffler ..                            | .....            | Paul Evans.           |                                       |
| Nebraska .....            | Lincoln .....                          | C. L. Ingersoll ..                   | C. E. Bessey ..                    | H. H. Nicholson                                                                                             | L. Bruner .....                    | F. W. Taylor ..                             | .....            | F. S. Billings ..     | De W. B. Brace<br>( <i>Phys.</i> ).   |
|                           |                                        | H. B. Duncanson                      | .....                              | Rachel Lloyd<br>T. L. Lyon.                                                                                 | .....                              | .....                                       | .....            | .....                 | H. N. Allen<br>( <i>Phys.</i> ).      |
| Nevada .....              | Reno .....                             | R. H. McDowell.                      | F. H. Hillman ..                   | N. E. Wilson ..                                                                                             | F. H. Hillman ..                   | R. H. McDowell                              | .....            | .....                 | A. H. Wood<br>( <i>Dairying.</i> ).   |
| New Hampshire             | Hanover .....                          | .....                                | .....                              | F. W. Morse ..                                                                                              | C. M. Weed ..                      | .....                                       | C. H. Pettee ..  | .....                 | H. H. Lampson<br>( <i>Biol.</i> ).    |
|                           |                                        | .....                                | .....                              | C. I. Parsons ..                                                                                            | .....                              | .....                                       | .....            | .....                 |                                       |

|                       |                    |                                         |                                          |                                                                                                                           |                                          |                                         |                                    |                   |                      |                              |
|-----------------------|--------------------|-----------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------|------------------------------------|-------------------|----------------------|------------------------------|
| New Jersey (State).   | New Brunswick.     | .....                                   | .....                                    | E. B. Voorhees.<br>L. A. Voorhees.<br>J. P. Street.<br>P. T. Ansten.<br>C. S. Cathcart.                                   | J. B. Smith.....                         | B. D. Halsted.....                      | .....                              | .....             | .....                | Julius Nelson<br>(Biol.).    |
| New Jersey (College). | New Brunswick.     | .....                                   | B. D. Halsted.....                       | .....                                                                                                                     | .....                                    | .....                                   | .....                              | .....             | .....                | .....                        |
| New Mexico.....       | Las Cruces.....    | A. E. Blount.....                       | E. O. Wootton.....                       | E. O. Wootton.....                                                                                                        | C. H. T. Townsend.....                   | A. E. Blount.....                       | J. B. Sloan.....                   | .....             | .....                | .....                        |
| New York (State).     | Geneva.....        | G. W. Churchill.....                    | .....                                    | L. L. Van Slyke.<br>C. G. Jenter.<br>A. L. Knisely.<br>S. Ando.<br>W. H. Andrews.<br>B. L. Murray.<br>G. C. Caldwell..... | .....                                    | S. A. Beach.<br>C. E. Hunn.....         | .....                              | .....             | .....                | .....                        |
| New York (Cornell).   | Ithaca.....        | I. P. Roberts.....<br>G. C. Watson..... | A. N. Prentiss.....<br>W. R. Dudley..... | G. W. Cavanaugh.....                                                                                                      | J. H. Comstock<br>M. V. Slingerland..... | L. H. Bailey.....<br>L. C. Corbett..... | .....                              | .....             | James Law.....       | .....                        |
| North Carolina...     | Raleigh.....       | F. E. Emery.....                        | G. McCarthy.....                         | H. B. Battle.....                                                                                                         | G. McCarthy.....                         | A. Rhodes.....                          | C. F. Von Hermann.<br>R. Nunn..... | .....             | .....                | .....                        |
| North Dakota...       | Fargo.....         | W. M. Hayes.....                        | H. L. Bolley.....                        | B. W. Kilgore.....<br>F. B. Carpenter.<br>T. L. Blalock.<br>J. S. Meng.....                                               | .....                                    | .....                                   | .....                              | .....             | T. D. Hinchauch..... | .....                        |
| Ohio.....             | Columbus.....      | J. F. Hickman.....                      | Freda Detmers.....                       | .....                                                                                                                     | .....                                    | .....                                   | .....                              | W. H. Baker.....  | .....                | .....                        |
| Oklahoma.....         | Stillwater.....    | A. C. Magruder.....                     | .....                                    | G. L. Holter.....                                                                                                         | .....                                    | .....                                   | A. C. Magruder.....                | .....             | .....                | .....                        |
| Oregon.....           | Corvallis.....     | H. T. French.....                       | .....                                    | G. W. Shaw.....                                                                                                           | F. L. Washburn.....                      | .....                                   | Geo. Coote.<br>G. C. Butz.....     | .....             | .....                | .....                        |
| Pennsylvania.....     | State College..... | W. H. Caldwell.....                     | W. A. Buckhout.....                      | Wm. Frear.....<br>G. L. Holter.<br>W. S. Sweetser.<br>J. A. Fries.<br>J. W. Fields.....                                   | .....                                    | .....                                   | .....                              | .....             | .....                | .....                        |
| Rhode Island.....     | Kingston.....      | C. O. Flagg.....<br>J. D. Towar.....    | .....                                    | H. J. Wheeler.....<br>B. L. Hartwell.<br>M. B. Hardin.<br>C. W. Sims.<br>F. S. Shiver.....                                | .....                                    | .....                                   | .....                              | .....             | F. E. Rico.....      | .....                        |
| South Carolina...     | Fort Hill.....     | J. S. Newman.....                       | .....                                    | .....                                                                                                                     | .....                                    | .....                                   | .....                              | .....             | .....                | .....                        |
| South Dakota.....     | Brookings.....     | L. Foster.....                          | T. A. Williams.....                      | .....                                                                                                                     | .....                                    | .....                                   | .....                              | .....             | .....                | A. H. Wheaton<br>(Dairying). |
| Tennessee.....        | Knoxville.....     | P. F. Kefauver.....                     | F. Lamson—<br>Scribner.....              | J. H. Shepard.....<br>C. G. Hopkins.....                                                                                  | J. H. Orcutt.....<br>J. M. Aldrich.....  | J. C. Whitten.....                      | .....                              | .....             | .....                | .....                        |
| Texas.....            | College Station.   | G. W. Curtis.....                       | .....                                    | J. B. McBryde.....                                                                                                        | .....                                    | R. L. Watts.....                        | .....                              | D. Adriaance..... | M. Francis.....      | .....                        |
|                       |                    | J. M. Carson.....                       | .....                                    | H. H. Harrington.<br>D. Adriaance.<br>P. S. Tilson.....                                                                   | .....                                    | .....                                   | .....                              | .....             | .....                | .....                        |

Table showing experiment station officers engaged in principal lines of work—Continued.

| State.              | Location.        | Agriculturists.        | Botanists.             | Chemists.              | Entomologists.        | Horticulturists.                   | Meteorologists. | Veterinarians.    | Miscellaneous.               |
|---------------------|------------------|------------------------|------------------------|------------------------|-----------------------|------------------------------------|-----------------|-------------------|------------------------------|
| Utah .....          | Logan .....      | .....                  | .....                  | W. P. Cutter. ....     | E. S. Richman. ....   | E. S. Richman. ....                | .....           | .....             | .....                        |
| Vermont .....       | Burlington ..... | .....                  | L. R. Jones .....      | J. L. Hills .....      | G. H. Perkins. ....   | .....                              | .....           | F. A. Rich. ....  | .....                        |
| Virginia .....      | Blacksburg ..... | D. O. Nourse .....     | E. A. Smyth, jr. ....  | B. O. White. ....      | .....                 | .....                              | .....           | .....             | W. B. Alwood<br>(Myc.).      |
| Washington .....    | Pullman .....    | Jno. O'B. Scobey ..... | E. R. Lake .....       | R. J. Davidson. ....   | W. B. Alwood. ....    | W. B. Alwood.<br>R. H. Price. .... | .....           | E. P. Niles ..... | .....                        |
| West Virginia ..... | Morgantown ..... | D. D. Johnson .....    | C. F. Millsbaugh ..... | T. L. Watson .....     | .....                 | E. R. Lake .....                   | .....           | C. E. Munn. ....  | .....                        |
| Wisconsin .....     | Madison .....    | .....                  | .....                  | G. G. Hitchcock. ....  | A. D. Hopkins .....   | E. S. Goff .....                   | .....           | .....             | C. F. Millsbaugh<br>(Mier.). |
| .....               | .....            | .....                  | .....                  | R. J. J. DeRoode ..... | .....                 | .....                              | .....           | J. A. Craig. .... | J. W. Decker<br>(Dairying).  |
| .....               | .....            | .....                  | .....                  | S. M. Babcock. ....    | .....                 | .....                              | .....           | .....             | F. H. King<br>(Phys.).       |
| .....               | .....            | .....                  | .....                  | F. W. Woll. ....       | .....                 | .....                              | .....           | .....             | .....                        |
| Wyoming .....       | Laramie .....    | .....                  | Aven Nelson .....      | J. D. Conley. ....     | F. J. Niswander ..... | B. C. Buffum. ....                 | .....           | .....             | J. D. Conley<br>(Geol.).     |
| .....               | .....            | .....                  | .....                  | E. E. Slosson. ....    | .....                 | .....                              | .....           | .....             | .....                        |

# LIST OF AGRICULTURAL SCHOOLS AND COLLEGES IN THE UNITED STATES, WITH COURSES OF STUDY AND BOARDS OF INSTRUCTION.

## ALABAMA.

**Agricultural and Mechanical College, Alabama Polytechnic Institute, Auburn.**

### COURSES OF STUDY.

The courses of study are five. Three of these require four years each for completion and lead to the degree of B. S.: Course in chemistry and agriculture, course in mechanics and engineering, and general course. The remaining two courses require two years each and lead to a certificate: Two years' course in agriculture and two years' course in mechanic arts.

### FACULTY.

William LeRoy Broun, M. A., LL. D. *Pres., Phys. and Astr.*; O. D. Smith, M. A., *Math.*; P. H. Mell, jr., M. E., Ph. D., *Nat. Hist. and Geol.*; J. H. Lane, C. E., M. A., *Civ. Engin. and Drawing*; C. C. Thach, B. E., *Engl. and Pol. Econ.*; N. T. Lupton, M. A., M. D., LL. D., *Gen. and Ag. Ch. and St. Ch.*; J. H. Wills, Lieut. 21st Inf., U. S. A., *Mil. Sci.*; J. J. Wilmore, M. E., *Dir. Lab. and Instr. Mech. Arts*; G. F. Atkinson, Ph. B., *Biol.*; C. H. Barnwell, M. A., *Adj. Mod. Lan. and Engl.*; G. Petrie, M. A., Ph. D., *Hist. and Lat.*; A. F. McKissick, M. A., *Adj. Elec. Engin.*; B. A. Blakey, M. E., *Instr. Mech. Arts*; B. H. Crenshaw, M. S., *Mech. Arts*; C. C. Johnson, B. S., *Asst. in Math.*; C. B. Glenn, B. S., *Asst. in Engl.*; S. J. Buckalew, B. S., *Asst. in Math.*; L. E. Baker, B. S., *Asst. in Drawing.*; W. A. Marshall, B. S., *Asst. in Phys.*; B. M. Duggar, B. S., *Asst. in Biol.*; A. D. McLennan, B. S., *Asst. in Mech. Arts*; J. H. Drake, M. D., *Surgeon.*

## ARIZONA.

**College of Agriculture of the University of Arizona, Tucson.**

### COURSE OF STUDY.

The course of study in agriculture requires four years for completion and leads to the degree of B. S.

### FACULTY.

M. P. Freeman, *Chanc.*; F. A. Gulley, M. S., *Ag. and Dir. Expt. Sta.*; C. B. Collingwood, M. S., *Ch.*; Vasa E. Stolbrand, C. E., *Math. and Irr. Engin.*; T. B. Comstock, D. Sc., *Mining and Metal.*; J. W. Toumcy, B. S., *Bot. and Ent.*; L. E. Benton, *Hort.*; H. J. Hall, *Prin. Prep. Dept.*

## ARKANSAS.

**Arkansas Industrial University, Fayetteville.**

### COURSES OF STUDY.

The courses of study are six and require four years each for completion: Agricultural, leading to the degree of B. S. A.; mechanical engineering, leading to the degree of B. M. E.; civil engineering, leading to the degree of C. E.; scientific,

leading to the degree of B. S.; electrical engineering, leading to the degree of B. E. E.; and classical, leading to the degree of B. A. In addition the University offers a normal course, leading to certificate of licentiate of instruction. Each of these courses requires two years of preparatory work. The University also offers a course in medicine, leading to the degree of M. D., and three post graduate courses, leading respectively to the degrees of M. A., M. S., and Ph. D.

#### FACULTY.

E. H. Murfee, M. A., LL. D., *Pres., Psychol. and Eth.*; A. E. Menke, D. Sc., *Ag., Ch., and Phys.*; O. C. Gray, M. A., LL. D., *Math., Log., and Astr.*; J. F. McNeill, B. S., *Biol. and Geol.*; R. H. Willis, M. A., *Engl., and Mod. Lan.*; R. W. Dowdy, 1st Lieut. 17th Inf., U. S. A., *Mil. Sci. and Tac.*; C. V. Kerr, Ph. M., M. E., *Mech. Arts and Engin.*; C. H. Leverett, M. A., *Anc. Lan.*; J. F. Howell, M. A., *Ped. and Hist.*; G. C. P. Schoff, C. E., *Adj. Civ. Engin.*; W. B. Bentley, *Adj. Ch. and Phys.*; Ella Carnall, Ph. M., *Adj. Engl.*; G. W. Droke, M. A., *Adj. Math.*; H. B. Smith, M. E., *Adj. Elec. Engin.*; Jessie L. Cravens, B. L., *Instr. Eloc.*; J. B. Marcheselli, *Music*; S. L. Grinstead, *Instr. Woodwork*; Wm. M. Gilmore, *Instr. Foundry and Forge.*; Julia A. Garside, *Lib.*

#### Branch Normal College of Arkansas Industrial University, Pine Bluff.

#### COURSES OF STUDY.

The courses of study are three: Normal, classical, and agricultural and mechanical.

#### FACULTY.

J. C. Corbin, M. A., *Prin.*; J. C. Smith, B. A., *1st Asst.*; Alice A. Sizemore, B. A., *2d Asst.*; T. G. Childress, B. A., *3d Asst.*; G. P. Eustace, *Mech. Dept.*

### CALIFORNIA.

#### College of Agriculture of the University of California, Berkeley.

#### COURSE OF STUDY.

The course of study requires four years for completion and leads to the degree of B. S.

#### FACULTY.

M. Kellogg, M. A., *Act. Pres., Lat. Lau. and Lit.*; I. Stringham, Ph. D., *Dean, Math.*; E. W. Hilgard, Ph. D., LL. D., *Ag. Ch. and Dir. Expt. Sta.*; E. J. Wickson, M. S., *Assoc. Ag., Hort., and Ent.*; R. H. Loughridge, Ph. D., *Ag. Geol. and Ag. Ch.*; E. L. Greene, Ph. B., *Assoc. Bot.*; Wm. B. Rising, M. E., Ph. D., *Ch.*; E. O'Neill, Ph. B., *Ch.*; J. Le Conte, M. D., LL. D., *Geol. and Nat. Hist.*; A. C. Lawson, M. A., Ph. D., *Assoc. Min. and Geol.*; G. C. Edwards, Ph. B., *Assoc. Math.*; M. W. Haskell, Ph. D., *Math.*; F. Slate, B. S., *Phys.*; H. Kower, C. E., *Asst. Instr. Drawing*; F. Soulé, *Civ. Engin. and Astr.*; B. Moses, Ph. D., *Hist. and Pol. Econ.*; C. M. Gayley, B. A., *Engl.*; C. B. Bradley, M. A., *Assoc. Engl.*; A. F. Lange, M. A., *Engl.*; A. Putzker, *Ger.*; J. H. Senger, Ph. D., *Ger.*; F. V. Paget, B. L., B. S., *Assoc. Fr. and Spanish*; B. H. Randolph, 1st Lieut. 3d Artill., U. S. A., *Mil. Sci. and Tac.*; L. Paparelli, *Lic. Ag., Instr. in Vit. and Olive Culture*; F. Lengfield, Ph. D., *Instr. Ch.*; J. H. Gray, jr., B. S., *Instr. Ch.*; M. A. Howe, Ph. B., *Instr. Crypt. Bot.*; A. O. Leuschner, B. A., *Instr. Math.*; W. E. Ritter, M. A., *Instr. Biol. Lab.*; W. J. Raymond, B. S., *Instr. Phys.*; F. G. Burgess, B. S., *Instr. Topographical and Free-Hand Drawing*; W. D. Armes, Ph. B., *Instr. Engl.*; F. G. Hubbard, Ph. D., *Instr. Engl.*; S. D. Huntington, B. A., *Instr. Fr.*; H. I. Randall, B. S., *Instr. Civ. Engin.*; J. Sutton, Ph. B., *Recorder*; M. E. Jaffa, Ph. B., *Asst. in Ag. Lab.*; Geo. E. Colby, Ph. B., *Asst. in Vit. Lab.*; C. W. Woodworth, M. S., *Asst. in Ent.*; E. R. Drew, B. S., *Asst. in Phys.*; F. H. Payne,

M. D., *Dir. Phys. Culture*; Mary B. Ritter, M. D., *Woman Physician in Dept. Phys. Culture*; W. E. Magee, *Asst. in Phys. Culture*; F. T. Bioletti, *For. Cellar*; V. K. Chestnut, B. S., *Asst. in Ch.*; F. W. A. Wright, B. S., *Asst. in Ch.*; W. L. Jepson, Ph. B., *Asst. in Bot.*; C. Palache, B. S., *Fellow in Min.*; J. C. Rowell, B. A., *Lib.*; C. H. Shinn, B. A., *Insp. Sta.*

## COLORADO.

**The State Agricultural College of Colorado, Fort Collins.**

### COURSES OF STUDY.

The courses of study are four, each requiring two years in addition to three years of preparatory work, and each leading to the degree of B. S.: The agricultural course, the mechanical course, the irrigation engineering course, and the ladies' course.

### FACULTY.

Alston Ellis, M. A., Ph. D., LL. D., *Pres., Pol. Econ. and Log.*; J. W. Lawrence, B. S., *Mech. and Drawing*; Maud Bell, *Hist., Lit., and Lan.*; D. O'Brine, M. E., D. Sc., M. D., *Ch. and Geol.*; L. G. Carpenter, M. S., *Phys. and Irr. Engin.*; C. S. Crandall, M. S., *Bot. and Hort.*; J. C. Dent, Capt. 20th Inf., U. S. A., *Mil. Sci. and Tac.*; C. P. Gillette, M. S., *Zoöl. and Ent.*; Walter J. Quick, B. S., *Ag.*; Grace Patton, B. S., *Engl. and Sten.*; W. J. Myers, B. S., *Math.*; F. J. Annis, M. S., *Sec. Fac.*; Celia M. Southworth, *Lib.*; F. A. Huntley, B. S. A., *Ag.*; C. R. Richards, M. E., *Mech. and Drawing*; J. D. Stannard, B. S., *Phys. and Engin.*; Charles F. Baker, B. S., *Zoöl. and Ent.*

## CONNECTICUT.

**Sheffield Scientific School of Yale University, New Haven.**

### COURSES OF STUDY.

Courses of instruction occupying three years and leading to the degree of Ph. B. are arranged to suit the requirements of students. The first year's work is the same for all; for the last two years the instruction is chiefly arranged in special courses. Those most distinctly marked out are the following: In chemistry, in civil engineering, in mechanical engineering, in agriculture, in natural history, in biology preparatory to medical studies, in studies preparatory to mining and metallurgy, and in select studies preparatory to other higher studies. Under certain conditions the degrees of civil engineer and mechanical (or dynamical) engineer are conferred on bachelors of philosophy who have taken the first degree in engineering study and who pursue a higher course under the direction of the governing board of the school for at least two years.

### FACULTY.

Timothy Dwight, D. D., LL. D., *Pres.*; G. J. Brush, LL. D., *Dir., Min.*; W. D. Whitney, Ph. D., LL. D., *Comp. Phil.*; S. W. Johnson, M. A., *Theoretical and Ag. Ch.*; W. H. Brewer, Ph. D., *Ag.*; J. E. Clark, M. A., *Math.*; D. C. Eaton, M. A., *Bot.*; C. B. Richards, M. A., *Mech. Engin.*; T. R. Lounsbury, M. A., *Engl.*; A. E. Verrill, M. A., *Zoöl. and Instr. in Geol.*; S. I. Smith, M. A., *Comp. Anat.*; W. G. Mixter, M. A., *Ch.*; A. J. DuBois, C. E., Ph. D., *Civ. Engin.*; C. S. Hastings, Ph. D., *Phys.*; Henry W. Farnam, M. A., R. P. D., *Pol. Econ.*; R. H. Chittenden, *Physiol. Ch.*; A. S. Wheeler, M. A., *Instr. in Ger.*; M. Bailey, M. A., *Instr. in Eloc.*; J. H. Niemeyer, M. A., *Drawing*; T. W. Mather, D. E., *Instr. in Mech. Engin.*; Lieut. C. A. L. Totten, M. A., *Mil. Sci.*; S. L. Penfield, Ph. B., *Min.*; H. L. Wells, Ph. B., *An. Ch.*; S. E. Barney, C. E., *Instr. Math. and Civ. Engin.*; W. J. Comstock, Ph. B., *Instr. Org. Ch.*; F. E. Beach, Ph. B., *Asst. in Phys.*; H. DeW. Carrington, Ph. B., *Instr. Ger.*; A. B. Adams, Ph. B., *Asst. in Ch.*; A. G. Cameron, Ph. D., *Fr.*; A. J. Wakeman, Ph. B., *Asst. in An.*

*Ch.*; P. F. Smith, Ph. D., *Instr. Math.*; W. A. Setchel, Ph. D., *Asst. in Biol.*; E. H. Lockwood, Ph. B., *Instr. Drawing and Mech.*; Irving Fisher, Ph. D., *Instr. Astr.*; A. C. Alexander, Ph. B., *Asst. in Phys.*; Langdon Frothingham, D. V. M., *Asst. in Vet. Sci. and Bact.*; H. A. Smith, B. A., *Asst. in Engl.*; F. S. Meara, B. A., *Asst. in Physiol. Ch.*; G. L. Amerman, B. A., *Asst. in Physiol. Ch.*; H. L. Wheeler, Ph. B., *Asst. in An. Ch.*; G. P. Starkweather, Ph. B., *Asst. in Drawing.*

### **Storrs Agricultural School, Mansfield.**

#### **COURSE OF STUDY.**

The course of study requires three years for completion and leads to no degree.

#### **FACULTY.**

B. F. Koons, Ph. D., *Prin.*; A. B. Peebles, B. S., *Ch. and Math.*; L. P. Chamberlain, *Farm Supt.*; C. S. Phelps, B. S., *Ag.*; Miss Josephine Nettleton, *Teacher*; Mrs. C. E. Hilliard, *Matron.*

### **DELAWARE.**

#### **Delaware College, Newark.**

#### **COURSES OF STUDY.**

The courses of study are seven and require four years each for completion: The classical and the Latin scientific course, each leading to the degree of B. A.; the course in modern languages and science, leading to the degree of B. S.; the courses in engineering, leading to the degrees of C. E., M. E., and E. E.; and the agricultural course, leading to the degree of B. Ag.

#### **FACULTY.**

A. N. Raub, Ph. D., *Pres., Engl., Men., Mor., and Pol. Sci.*; T. R. Wolf, Ph. D., *Ch., Min., and Sanitary Sci.*; F. D. Chester, M. S., *Bot. and Geol.*; G. A. Harter, M. A., *Math. and Phys.*; C. S. Conwell, M. A., *Anc. and Mod. Lan.*; M. H. Beckwith, *Hort. and Ent.*; C. L. Penny, M. A., *Ger.*; F. A. Weihe, M. E., *Mech. and Elec. Engin.*; F. H. Robinson, C. E., *Civ. Engin.*; W. H. Bishop, B. S., *Ag.*; H. P. Eves, D. V. S., *Vet. Sci.*; Lieut. E. C. Brooks, *Mil. Sci. and Tac.*

### **FLORIDA.**

#### **Florida State Agricultural and Mechanical College, Lake City.**

#### **COURSES OF STUDY.**

Besides a preparatory department, there are four full collegiate courses of study, each requiring four years for completion: The scientific and classical course, leading to the degree of B. A.; the agricultural course, leading to the degree of B. S.; the mechanical course, leading to the degree of M. E.; and the civil engineering course, leading to the degree of C. E.

#### **FACULTY.**

F. L. Kern, M. A., *Pres., Pol. Econ. and Log.*; C. C. Ballou, Lieut. 16th Inf., U. S. A., *Mil. Sci., Tac., and Civ. Engin.*; J. N. Whitner, M. A., *Ag.*; J. M. Pickel, M. A., Ph. D., *Phys. and Ch.*; H. P. Baya (V. M. I.), *Math.*; W. W. Seals, M. A., *Engl. Lan. and Lit.*; H. C. Powers, *Man. Train.*; E. J. Bending, *Asst. in Man. Train.*; J. M. Stewart, B. A., *Lat. and Hist.*; F. W. Pickel, B. A., M. S., *Biol. and Nat. Sci.*; J. C. Martin, jr., M. A., *Prin. Subcollegiate Dept.*; D. L. McSwain, L. I., *Asst. Subcollegiate Dept.*; J. F. Appell, M. D., *Physician*; J. E. Futch, *Lib.*; W. H. Perry, *Steward*.

**Florida State Normal School, Tallahassee.**

## COURSES OF STUDY.

The courses of study are three: Preparatory, normal, and manual training.

## FACULTY.

T. DeS. Tucker, M. A., *Pres.*; T. V. Gibbs, *Math.*; F. C. Johnson, *Manual Train. and Ch.*; W. I. Vason, M. A., *Ag.*; Ida A. Gibbs, B. A., *Prin. Prep. Dept.*

**GEORGIA.****Georgia State College of Agriculture and Mechanic Arts, Athens.**

## COURSES OF STUDY.

Two courses of study, requiring four years each for completion, leading to the degrees of B. S. and B. E.; one three years' course leading to the degree of B. Ag.; post graduate courses of one year each leading to degrees of M. S., C. E., and M. Ag.; special courses in chemistry, mining and metallurgy, in agriculture, in electrical engineering, and in building and architecture, in which certificates of attainment are given.

## FACULTY.

H. C. White, Ph. D., *Pres., Ch.*; L. H. Charbonnier, M. A., Ph. D., *Phys.*; C. P. Willcox, M. A., LL. D., *Mod. Lan.*; C. Morris, M. A., *Engl.*; D. C. Barrow, jr., C. M. E., *Math.*; C. M. Strahan, C. M. E., *Engin.*; John P. Campbell, B. A., Ph. D., *Biol.*; J. H. T. McPherson Ph. D., *Hist.*; J. B. Hunnicutt, B. A., *Ag.*; C. M. Snelling, B. S., *Instr. Math. and Comt.*; C. H. Herty, Ph. D., *Instr. An. Ch.*; Jesse Coates, B. E., *Instr. Phys.*

**North Georgia Agricultural College, Dahlonega.**

## COURSE OF STUDY.

This requires for completion four years in addition to two years of preparatory work, and leads to the degree of B. A. Partial courses are also provided leading to certificates of proficiency.

## FACULTY.

William E. Boggs, D. D., *Chanc. of Univ.*; William S. Basinger, M. A., *Pres.*; Benj. P. Gaillard, M. A., *Nat. Sci.*; Walter S. Wilson, M. A., *Math.*; Edward P. Lawton, 2d Lieut. 13th U. S. Inf., U. S. A., *Mil. Sci. and Fr.*; Elias B. Vickery, B. A., *Anc. Lan. and Lit.*; Miss Mary E. Smith, *Instr. Engl.*

**Middle Georgia Military and Agricultural College, Milledgeville.**

## COURSE OF STUDY.

The course of study is preparatory to the University of Georgia, leading through five classes to a certificate of proficiency. Elective and commercial studies are also provided.

## FACULTY.

J. C. Lynes, Ph. D., *Pres., Ch., Biol., and Mod. Lan.*; O. M. Cone, M. A., *Math. and Astr.*; W. E. Reynolds, M. A., *Engl. Lan. and Lit.*; A. C. Newell, *Adj. Anc. Lan.*; T. S. Lucas, *Mil. Sci. and Hist.*; Miss Gertrude Treanor, *Musie*; Miss Hattie Ellis, *Art.*

**South Georgia College, Thomasville.****COURSE OF STUDY.**

The course of study is preparatory to the University of Georgia, including two years' work of the University grade.

**FACULTY.**

W. E. Boggs, D. D., *Chanc. of Univ.*; D. H. Parker, *Pres., Prin. Acad.*; R. H. Snively, *Comt. and Prin. Collegiate Dept.*; Miss Lucy M. Roberts, *Prin. Intermediate Dept.*; Miss Mattie B. Williams, *Prin. Primary Dept.*; Miss Annie Arrington, *Art and Ind. Drawing.*

**Southwest Georgia Agricultural College, Cuthbert.****COURSE OF STUDY.**

The course of study is preparatory to the University of Georgia, including two years' work of the university grade.

**FACULTY.**

L. W. Haskell, *Pres., Math.*; E. V. Baldy, *Lat. and Greek*; W. W. Elwang, *Engl. and Phys.*; Miss Maria Freeman, *Prep. Dept.*; Miss Minnie Hendry, *Prep. Dept.*

**ILLINOIS.****College of Agriculture of the University of Illinois, Champaign.****COURSES OF STUDY.**

The courses of study are three: The agricultural course, requiring four years for completion and leading to the degree of B. S.; the junior course in agriculture, requiring two years for completion, and leading to no degree; and a special course for farmers beginning in January and continuing eleven weeks.

**FACULTY.**

T. J. Burrill, M. A., Ph. D., *Act. Regent., Bot. and Hort.*; G. E. Morrow, M. A., *Dean, Ag.*; S. W. Shattuck, M. A., C. E., *Math.*; I. O. Baker, C. E., *Civ. Engin.*; E. Snyder, M. A., *Ger.*; J. D. Crawford, M. A., *Hist.*; Nathaniel Butler, jr., M. A., *Engl. Lan. and Lit.*; F. F. Frederick, *Ind. Art.*; S. W. Parr, M. S., *An. Ch.*; A. W. Palmer, D. Sc., *Ch.*; S. A. Forbes, Ph. D., *Zoöl. and Ent.*; J. H. Brownlee, M. A., *Rhet. and Oratory*; Donald McIntosh, V. S., *Vet. Sci.*; C. W. Rolfe, M. S., *Geol.*; M. R. Paradis, M. A., *Fr.*; Lieut. E. R. Hills, *Mil. Sci.*; G. W. Parker, *Instr. Woodwork.*

**INDIANA.****School of Agriculture, Horticulture, and Veterinary Science of Purdue University, La Fayette.****COURSE OF STUDY.**

This requires four years for completion and leads to the degree of B. S.

**FACULTY.**

J. H. Smart, M. A., LL. D., *Pres.*; W. F. M. Goss, M. A., *Experimental Engin.*; M. C. Stevens, M. A., *Math.*; O. J. Craig, M. A., Ph. D., *Pol. Econ. and Hist.*; James Troop, M. S., *Hort. and Ent.*; A. L. Green, Ph. C., *Dean Sch. Phar.*; H. A. Huston, M. A.,

A. C., *Ag. Ch.*; Mrs. Emma MontMcRae, *Engl. Lit. and Lady Prin.*; J. C. Arthur, M. S., D. Sc., *Veg. Physiol. and Pathol.*; A. E. Phillips, C. E., M. A., *Civ. Engin.*; Stanley Coulter, M. A., Ph. D., *Biol.*; Anna Von Holland, *Mod. Lan.*; Laura A. Fry, *Ind. Art.*; W. C. Latta, M. S., *Ag.*; C. S. Plumb, B. S., *Ag. Sci., and Dir. Expt. Sta.*; Erastus Test, M. A., M. D., *Prin. Prep. Dept.*; W. E. Stone, M. A., Ph. D., *Ch.*; A. P. Carman, M. A., D. Sc., *Phys. and App. Elec.*; W. L. Williams, V. S., *Vet. Sci.*; M. Golden, *Practical Mech.*; J. J. Flather, M. M. E., *Mech. Eng.*; D. D. Johnson, 1st Lieut. Fifth Artill., U. S. A., *Mil. Sci. and Tac. and Asst. Instr. Math.*; G. C. Spitzer, Ph. G., *Phar.*; W. P. Turner, *Instr. Forge and Mach. Work*; Anna E. Baker, B. S., *Instr. Wood Carving*; Kate Wentz, M. S., *Asst. Instr. Math.*; D. T. McDougal, B. S., *Asst. Biol. Lab.*; J. D. Hoffman, B. M. E., *Instr. Woodwork*; Carolyn Gerrish, *Instr. Eloc.*; F. A. Waterman, M. A., *Instr. Elec. Dept.*; W. J. Jones, M. S., *Asst. Ch. Lab.*; J. Stuermer, Ph. Y., *Instr. Phar. Dept.*; C. D. Peterson, B. C. E., *Mech. Drawing*; G. A. Read, *Asst. in Wood and Iron Work*; P. D. Brown, Ph. G., *Instr. in Phar. Dept.*; J. H. Wells, B. M. E., *Asst. in Wood Shop*; Elizabeth Day Swan, *Lib.*

## IOWA.

**Iowa State College of Agriculture and Mechanic Arts, Ames.**

### COURSES OF STUDY.

The courses of study are seven: The course in sciences as related to the industries, leading to the degree of B. S.; the course in agriculture, leading to the degree of B. Ag.; the course for ladies, leading to the degree of B. L.; the course in mechanical engineering, leading to the degree of B. M. E.; the course in civil engineering, leading to the degree of B. C. E.; the course in electrical engineering, leading to the degree of B. S.; and the course in veterinary science, leading to the degree of D. V. M. The last-mentioned course requires three years for completion; each of the others four years.

### FACULTY.

W. M. Beardshear, M. A., LL. D., *Pres., Psychol. and Eth.*; M. Stalker, M. S., V. S., *Vet. Sci.*; J. L. Budd, M. H., *Hort.*; E. W. Stanton, M. S., *Math. and Econ. Sci.*; D. S. Fairchild, M. D., *Pathol., Histol., Thera., and Comp. Anat.*; J. R. Lincoln, *Mil. Sci. and Tac.*; A. A. Bennett, M. S., *Ch.*; Herbert Osborn, M. S., *Zoöl. and Ent.*; W. S. Franklin, M. S., *Phys. and Elec. Engin.*; A. C. Barrows, M. A., D. D., *Engl. Lit. and Hist.*; L. H. Pammel, B. Ag., *Bot.*; Mrs. Eliza Owens, *Dom. Econ.*; James Wilson, *Ag. and Dir. Expt. Sta.*; G. E. Patrick, M. S., *Ag. Ch.*; A. Marston, C. E., *Civ. Engin.*; Miss Stephanie Marx, B. L., *Fr. and Ger.*; Miss Margaret Doolittle, B. A., *Engl., Lat., and Rhet.*; Miss Fanny F. Thomas, M. A., *Lib., Eloc.*; D. A. Kent, B. S., *Ag.*; G. W. Bissell, M. E., *Mech. Engin.*; W. B. Niles, D. V. M., *Vet. Sci.*; F. W. Harris, *For. and Instr. in Shop Work*; Joseph Chamberlain, B. S., *Asst. in Ch.*; Leo Thurlimann, B. S., *Asst. in Ch.*; Miss Minnie Roberts, B. L., *Asst. in Math.*; S. W. Beyer, B. S., *Asst. in Geol. and Zoöl.*; W. A. McClanahan, D. V. M., *Surgeon*; Miss Marie Chambers, *Dir. of Music*; G. L. Backus, *Instr. Piano and Organ.*

## KANSAS.

**Kansas State Agricultural College, Manhattan.**

### COURSES OF STUDY.

The regular course of study requires four years for completion and leads to the degree of B. S. Special and post graduate courses are also provided. The degree of M. S. is given upon post graduate study or satisfactory evidence of proficiency, after three years, in science and industrial arts.

## FACULTY.

George T. Fairchild, M. A., *Pres., Log. and Pol. Econ.*; G. H. Failyer, M. S., *Ch. and Min.*; E. A. Popenoe, M. A., *Hort. and Ent.*; D. E. Lantz, M. S., *Lib., Math.*; J. D. Walters, M. S., *Ind. Art and Designing*; Ira D. Graham, B. S., *Sec., Supt. Teleg. and Instr. in Bookkeeping*; O. E. Olin, *Engl. Lan. and Lit.*; Mrs. Nellie S. Kedzie, M. S., *Household Econ. and Hyg.*; Mrs. E. E. Winchip, *Supt. Sewing.*; O. P. Hood, B. S., *Mech. and Engin.*; A. B. Brown, M. A., *Music*; J. S. C. Thompson, *Supt. Printing*; F. H. White, B. A., *Hist. and Constitutional Law*; C. C. Georgeson, M. S., *Ag. and Supt. Farm*; E. B. Bolton, Capt. 23d U. S. Inf., *Mil. Sci. and Tac.*; E. R. Nichols, M. A., *Phys.*; N. S. Mayo, M. S., D. V. S., *Physiol. and Vet. Sci.*; J. T. Willard, M. S., *Ch.*; J. W. Rain, *Instr. Engl.*; A. S. Hitchcock, M. S., *Bot.*; C. M. Breese, M. S., *Asst. in Ch.*; William Baxter, *For. Greenhouses*; E. Harrold, *For. Iron Shop*; W. L. House, *For. Wood Shop*; Jennie C. Tunnell, B. S., *Asst. Lib.*; Julia R. Pearce, *Asst. in Math.*; E. Ada Little, B. S., *Asst. in Sewing.*

## KENTUCKY.

**Agricultural and Mechanical College of Kentucky, Lexington.**

## COURSES OF STUDY.

The regular courses of study are four, requiring four years each for completion: The agricultural course, leading to the degree of B. S.; the scientific course, leading to the same degree; the classical course, leading to the degree of B. A.; and the engineering course, leading to the degree of C. E. Normal courses, requiring from one to four years and leading to a diploma, are also provided. Certificates of proficiency are given to those who do not complete a course undertaken.

## FACULTY.

J. K. Patterson, Ph. D., *Pres., Meta. and Civ. Hist.*; J. Shackleford, M. A., *V. Pres., Engl. Lan. and Lit.*; Robert Peter, M. D., (Em.) *Ch.*; J. G. White, M. A., *Math. and Astr.*; F. M. Helveti, M. A., *Fr. and Ger. Lan. and Lit.*; J. H. Neville, M. A., *Lat. and Greek Lan. and Lit.*; J. H. Kastle, Ph. D., *Ch.*; R. N. Roark, B. A., *Prin. Nor. Dept.*; H. Garman, *Zoöl. and Ent.*; C. W. Mathews, B. S., *Ag., Hort., and Bot.*; J. P. Nelson, M. A., *Civ. Engin. and Phys.*; M. L. Pence, M. S., *Civ. Engin. and Phys.*; F. Paul Anderson, B. M. E., *Mech. Engin.*; C. D. Clay, 1st Lieut., U. S. A., *Mil. Sci.*; J. W. Pryor, M. D., *Anat. and Physiol.*; W. K. Patterson, *Prin. Acad.*; J. L. Logan, B. A., *Asst. in Acad.*; J. W. Newman, B. S., *Asst. Nor. Dept.*; R. L. Blanton, M. Lit., *Greek and Lat.*; J. M. Davis, B. A., B. S., *Asst. in Acad.*; Mrs. Lucy B. Blackburn, *Asst. in Acad.*; James Murray, *Practical Hort.*

**State Normal School, Frankfort.**

## COURSES OF STUDY.

There are four courses of study: Normal course, agricultural course, mechanical course, and a course in domestic economy.

## FACULTY.

J. H. Jackson, M. A., *Prin.*; M. A. Davis, Ida Joyce Jackson, W. A. Creditt, M. A., and C. C. Monroe, M. A., *Teachers.*

## LOUISIANA.

**Louisiana State University and Agricultural and Mechanical College, Baton Rouge.**

## COURSES OF STUDY.

The regular courses of study are three, each requiring four years for completion: The course in agriculture, the course in mechanics and civil engineering, and the

literary course, the first two leading to the degree of B. S., the last to the degree of B. A. A preparatory department and a two years' commercial course are also provided.

#### FACULTY.

J. W. Nicholson, M. A., *Pres.*, *Math.*; Charles Chollet, B. A., *Anc. Lan.*; W. H. Dalrymple, M. R. C. V. S., *Vet. Sci.*; W. H. Goodale, B. A., *Civics, Mor. and Men. Sci.*; W. H. Magruder, M. A., *Engl. and Engl. Lit.*; H. P. McCain, 2d Lieut. 3d Inf., U. S. A., *Mil. Sci. and Tac.*; H. A. Morgan, B. S. A., *Hort and Ent.*; A. T. Prescott, M. A., *Nat. Hist.*; J. H. Randolph, jr., C. E., *Drawing and Mech.*; B. B. Ross, M. S., *Ch. and Min.*; E. L. Scott, B. A., *Mod. Lan.*; H. Skolfield, *Bookkeeping*; Wm. C. Stubbs, Ph. D., *Ag.*; W. D. Taylor, C. E., *Phys. and Civ. Engin.*; C. E. Ives, B. A., *Prin. Prep. Dept.*; D. N. Barrow, B. S., *Asst. Ag.*; H. M. Furman, B. S., *Asst. in Prep. Dept.*

### **Southern University and Agricultural and Mechanical College, New Orleans.**

#### COURSE OF STUDY.

The course in agriculture requires four years for completion and leads to the degree of B. S.

#### FACULTY.

H. A. Hill, *Pres.*, *Math.*; Hugh Jamieson, *Ag. and Supt. Mech. Dept.*; E. P. Baptiste, *Asst. Ag.*; William Seymour, *Mech.*; John A. Blohm, *Asst. Mech.*; V. L. Roy, *Ch. and Phys.*; W. J. Nickerson, *Prin. Music Dept.*

### **MAINE.**

### **Maine State College of Agriculture and the Mechanic Arts, Orono.**

#### COURSES OF STUDY.

Five full courses of study are provided, each requiring four years for completion: A course in agriculture, a course in chemistry, and a course in science and literature, each leading to the degree of B. S.; a course in civil engineering, leading to the degree of B. C. E.; and a course in mechanical engineering, leading to the degree of B. M. E. Special courses are also provided, leading to certificates.

#### FACULTY.

M. C. Fernald, M. A., Ph. D., *Pres.*, *Men. and Mor. Sci.*; George H. Hamlin, C. E., *Civ. Engin.*; Alfred B. Aubert, M. S., *Ch.*; Allen E. Rogers, M. A., *Hist., Log. and Pol. Econ.*; Walter Balentine, M. S., *Ag.*; Walter Flint, M. E., *Mech. Engin.*; Francis L. Harvey, M. S., Ph. D., *Nat. Hist.*; James N. Hart, C. E., *Math.*; Howard S. Webb, B. M. E., *Instr. in Shop Work, Sec., and Registrar*; Fred P. Briggs, B. S., *Nat. Hist.*; Nathan C. Grover, B. C. E., *Civ. Engin.*; Harriet C. Fernald, M. S., *Lib.*; Welton M. Munson, B. S., *Hort. and Lands. Gard.*; Horace M. Estabrooke, M. S., M. A., *Rhet. and Mod. Lan.*; James S. Stevens, M. S., Ph. D., *Phys.*; Mark L. Hersey, M. A., Lieut. 9th Inf., U. S. A., *Mil. Sci. and Tac.*; Gilbert M. Gowell, *Instr. Practical Ag.*; David W. Colby, B. S., *Asst. in Ch.*

### **MARYLAND.**

### **Maryland Agricultural College, College Park.**

#### COURSE OF STUDY.

The course of study requires four years and leads to the degree of B. S.

#### FACULTY.

H. E. Alvord, C. E., *Pres.*, *Ag.*; T. A. Gatch, M. A., *V. Pres.*, *Engl. Lan. and Lit.*; T. L. Brunk, B. S., *Bot. and Hort.*; E. W. Doran, Ph. D., *Zoöl. and Comp. Anat.*;

Milton Whitney, M. S., *Geol. and Soil Phys.*; H. B. McDonnell, M. D., *Ag. Ch.*; J. D. Hird, M. A., *Ch. and Instr. in Fr.*; W. H. Zimmerman, M. A., *Phys. and Instr. in Ger.*; R. H. Alvey, jr., B. A., *Hist., Pol. Econ., and Lat.*; J. S. Grisard, 2d Lieut., U. S. A., *Mil. Sci. and Tac., Math., and Drawing*; A. P. Works, *Math. and Instr. Eloc.*; J. R. Owens, M. D., *Registrar, Treas., and Sec. Fac.*; A. I. Hayward, B. S., *Instr. Ag.*; C. E. Straughn, *Instr. Woodwork*; E. H. Brinkley, *Instr. Metal Working*; T. P. Engle, *Instr. Forging and Smithing*.

## MASSACHUSETTS.

### Massachusetts Agricultural College, Amherst.

#### COURSE OF STUDY.

The course of study requires four years and leads to the degree of B. S.

#### FACULTY.

H. H. Goodell, M. A., LL. D., *Pres., Mod. Lan. and Engl. Lit.*; Levi Stockbridge, *Ag.*; C. A. Goessmann, Ph. D., LL. D., *Ch.*; S. T. Maynard, B. S., *Bot. and Hort.*; C. D. Warner, B. S., *Math. and Phys.*; Charles Wellington, Ph. D., *Assoc. Ch.*; C. H. Fernald, Ph. D., *Zoöl.*; C. S. Walker, Ph. D., *Men. and Pol. Sci.*; W. P. Brooks, B. S., *Ag.*; W. M. Dickinson, 1st Lieut. 17th Inf., U. S. A., *Mil. Sci. and Tac.*; G. F. Mills, M. A., *Engl.*; R. W. Lyman, LL. B., *Lect. on Farm Law*; J. B. Paige, V. S., *Vet. Sci.*

### Bussey Institution of Harvard University, Jamaica Plain.

#### COURSE OF STUDY.

The course of study occupies one year, and if preceded by a preliminary course of one year at the Lawrence Scientific School, or its equivalent, and supplemented by a year of advanced study at the university, leads to the degree of B. A.

#### FACULTY.

Thomas Motley, M. A., *Instr. in Farm.*; F. H. Storer, B. S., M. A., *Dean, Ag. Ch.*; B. M. Watson, B. A., *Instr. Hort.*; N. T. Kidder, B. S. A., *Instr. Bot.*; C. S. Sargent, B. A., *Dir. Arnold Arboretum*; Edmund Hersey, *Supt. Bussey Farm.*

## MICHIGAN.

### Michigan Agricultural College, Agricultural College.

#### COURSES OF STUDY.

The courses of study are two, each requiring four years for completion and leading to the degree of B. S., the agricultural course and the mechanical course. A post graduate course is also provided.

#### FACULTY.

O. Clute, M. S., *Pres.*; Theophilus C. Abbot, LL. D. (Em.), *Men. Ph. and Log.*; R. C. Kedzie, M. A., M. D., *Ch. and Curator of Ch. Lab.*; A. J. Cook, M. S., *Zoöl. and Ent., Cur. Mus.*; W. J. Beal, M. S., Ph. D., *Bot. and For., Cur. Bot. Mus.*; E. A. A. Grange, V. S., *Vet. Sci.*; H. G. Reynolds, M. S., *Sec.*; L. R. Taft, M. S., *Hort. and Lands. Gard.*; Howard Edwards, M. A., LL. D., *Engl. Lit. and Mod. Lan.*; E. A. Lewis, 2d Lieut. 18th Inf., U. S. A., *Mil. Sci. and Tac.*; F. S. Kedzie, M. S., *Ch.*; L. P. Breckenridge, *Mech.*; H. K. Vedder, C. E., *Math. and Civ. Engin.*; P. W. Harwood, M. S., *Ag., Supt. Farm*; P. B. Woodworth, B. S., *Asst. Phys.*; R. J. Coryell, B. S., *Asst. in Hort.*; A. B. Noble, B. A., *Engl. Lit. and Mod. Lan.*; W. S. Holdsworth,

B. S., *Drawing*; E. A. Burnett, B. S., *Asst. in Ag.*; F. B. Mumford, B. S., *Asst. in Ag.*; T. W. McNair, B. S., *Math.*; C. F. Wheeler, B. S., *Instr. Bot.*; G. H. Hicks, *Instr. Bot.*; Warren Babcock, jr., B. S., *Instr. Math.*; Mrs. L. E. Landon, *Lib.*; W. G. Groesbeck, *Asst. Sec.*; Thomas Gunson, *Flor.*; A. G. Gulley, M. S., *For. Hort. Dept.*; W. H. Van Dervoort, B. S., *For. Iron Shop*; A. R. Curtis, *For. Wood Shop*; Jos. McCracken, *For. Farm.*

## MINNESOTA.

**College of Agriculture of the University of Minnesota, *St. Anthony Park.***

### COURSE OF STUDY.

The course of study requires five years for completion and leads to the degree of B. AG.

### FACULTY.

Cyrus Northrop, LL. D., *Pres.*; ———, *Ag.*; S. B. Green, B. S., *Hort.*, Otto Lugger, Ph. D., *Ent. and Bot.*; Harry Snyder, B. S., *Ag. Ch.*; Olaf Schwartzkopff, D. V. M., *Vet. Med. and Surg.*; C. D. Smith, M. S., *Dairying*; H. W. Brewster, B. A., *Instr. Math.*

**State School of Agriculture of the University of Minnesota, *St. Anthony Park.***

### COURSE OF STUDY.

The course of study requires two years for completion and leads to a certificate.

### FACULTY.

W. W. Pendergast, *Prin.*, *Civics, Phys. Geog., and Math.*; H. W. Brewster, B. A., *Asst. Prin.*, *Math.*; W. Robertson, B. A., *Phys. and Lan.*; J. A. Vye, *Pen. and Acc.*; S. B. Green, B. S., *Hort. and App. Bot.*; T. L. Haecker, *Dairying*; C. R. Aldrich, *Supt. Shop Work*; W. H. Phillips, *Ag.* Lecturers: C. D. Smith, M. S., *Soils, Stock and Farm Management, and Dairying*; Olaf Schwartzkopff, D. V. M., *Animal Physiol. and Vet. Sci.*; Harry Snyder, B. S., *Ag. Ch.*; Otto Lugger, Ph. D., *Ent.*

## MISSISSIPPI.

**Agricultural and Mechanical College of Mississippi, *Agricultural College.***

### COURSE OF STUDY.

The course of study requires four years for completion and leads to the degree of B. S. Post graduate courses and a preparatory course are also provided.

### FACULTY.

S. D. Lee, *Pres.*; J. H. Connell, B. S., *Ag.*; A. B. McKay, B. S., *Hort.*; Harry Gwinner, *Instr. Drawing and Supt. Mech. Shops*; G. C. Creelman, B. S. A., *Biol. and Geol.*; Tait Butler, V. S., *Vet. Sci.*; W. L. Hutchinson, M. S., *Ch.*; W. H. Magruder, M. A., *Lib., Engl.*; B. M. Walker, M. S., *Math.*; G. W. Burr, Lieut. 1st Artill., U. S. A. *Mil. Sci. and Tac., and Assoc. Math.*; Dabney Lipscomb, M. A., *Prep. Dept.*; S. M. Tracy, M. S., *Dir. Expt. Sta.*; C. T. Ames, B. S., *Hort.*; W. D. Browning, B. M. E., *Instr. in Drawing and Mech. Shops*; A. M. Herget, *Instr. in Drawing and Mech. Shops*; W. R. Perkins, B. S., *Ch.*; J. M. White, M. S., *Engl.*; J. C. Herbert, B. S., *Instr. Prep. Dept. and Math.*; J. J. Gill, *Instr. Prep. Dept.*; J. S. Wallace, B. S., *Instr. Prep. Dept.*; A. M. Maxwell, *Instr. in Writing and Bookkeeping*; R. C. King, B. S., *Sec. and Purchasing Agt.*; W. H. Barr, M. D., *Surg.*; W. J. Gallaway, *Steward and Jan.*; J. F. Montgomery, *For. Farm.*

## Alcorn Agricultural and Mechanical College, Rodney.

### COURSES OF STUDY.

The courses of study are three: The academic course and the scientific preparatory course, each requiring two years for completion, and the scientific course, requiring four years for completion and leading to the degree of B. S.

### FACULTY.

J. H. Burrus, M. A. *Pres.*, *Men. and Mor. Ph.*; J. D. Burrus, M. A., *Math. and Ag.*; J. C. McAdams, M. A., *Pol. Econ., Bookkeeping, and Rhet.*; Joseph Anderson, M. A., *Lib., Phys., Ch. and Hist.*; J. A. Martin, B. S., *Engl. Branches*; J. A. Lester, B. A., *Instr. in Physiol., Zoöl., and Bot.*; B. F. Shannon, B. S., T. W. Talley, B. A., W. H. Luster, B. S., and William Townsend, B. S., *Instrs. Engl. Branches*; Mrs. Leonora E. Aray, *Matron*; J. B. Bemiss, *Instr. Carpentering*.

## MISSOURI.

### College of Agriculture and Mechanic Arts of the University of Missouri, Columbia.

### COURSE OF STUDY.

The course of study requires four years for completion and leads to the degree of B. Ag. There are also two short courses, a farmers' lecture course of three months, and a two years' elementary course. The college also offers a post graduate course, which requires two years for completion and leads to the degree of M. Ag.

### FACULTY.

R. H. Jesse, LL. D., *Pres.*; E. D. Porter, M. A., Ph. D., *Dean, Ag.*; P. Schweitzer, Ph. D., *Ch.*; E. A. Allen, L. D., *Engl.*; W. B. Smith, M. A., Ph. D., *Math.*; G. D. Purinton, M. A., Ph. D., M. D., *Biol.*; M. L. Lipscomb, M. A., *Phys.*; B. B. Buck, Lieut., U. S. A., *Mil. Sci.*; G. C. Broadhead, M. S., *Geol. and Min.*; Alexander Martin, M. A., LL. D., *Lecturer on Agricultural Law*; C. W. Marks, B. E., *Supt. Sch. of Mech. Arts*; C. B. Rearick, *Asst. Sch. Mech. Arts*; M. S. King, *Instr. Commercial Sch.*; J. W. Connaway, M. D., D. V. S., *Vet. Sci.*; J. P. Blanton, M. A., *Theory and Practice of Teaching*; C. A. Keffer, B. Ag., *Hort.*; F. C. Hicks, Ph. D., *Hist. and Pol. Sci.*; ———, *Asst. Ag.*

## NEBRASKA.

### Industrial College of the University of Nebraska, Lincoln.

### COURSES OF STUDY.

The courses of study are as follows, each requiring four years for completion: General scientific course, electrical and steam engineering course, agricultural course, and civil engineering course. Graduates of these courses are admitted to the degrees of B. S. and B. C. E. A two years' course in elementary agriculture is also provided.

### FACULTY.

James H. Canfield, M. A., *Chanc.*; C. L. Ingersoll, M. S., *Dean, Ag.*; H. H. Nicholson, M. A., *Ch. and Dir. Expt. Sta.*; H. E. Hitchcock, Ph. D., *Math.*; L. A. Sherman, Ph. D., *Engl. Lit.*; C. E. Bessey, Ph. D., *Bot.*; Rachel Lloyd, Ph. D., *An. Ch.*; DeW. B. Brace, Ph. D., *Phys.*; C. N. Little, Ph. D., *Civ. Engin.*; J. J. Pershing, 2d Lieut. 6th Cavalry, U. S. A., *Mil. Sci. and Tac.*; H. W. Caldwell, B. Ph. *Assoc. Am. Hist., and Civics*; Laurence Fossler, M. A., *Assoc. Germanic Lan.*; J. R. Wightman, Ph. D., *Assoc. Rom. Lan.*; E. H. Barbour, Ph. D., *Assoc. Geol. and Zoöl.*; F. M. Fling, Ph. D.,

*Assoc. European Hist.*; H. N. Allen, Ph. D., *Adj. Phys.*; T. M. Hodgman, B. A., *Adj. Math.*; F. W. Taylor, *Adj. Hort.*; R. B. Owens, E. E., *Assoc. Elec. Engin.*; W. R. Frazer, B. A., *Asst. Prin. Prep. Courses*; Sarah W. Moore, *Drawing*; R. W. Furnas, *Lect. on Forestry*; H. E. Fulmer, M. A., *Instr. Ch.*; O. V. P. Stout, B. C. E., *Instr. Math. and Civ. Engin.*; Lawrence Bruner, *Instr. Ent.*; G. B. Hussey, Ph. D., *Instr. Lat.*; Mary A. Tremain, *Instr. Hist.*; Herbert Bates, B. A., *Instr. Engl.*; W. P. Bowen, *Instr. Phys. Train.*; T. L. Lyon, B. S., *Instr. Ag. Ch.*; A. F. Woods, B. S., *Asst. Bot. Lab.*; ——— ———, *Man. Training*.

## NEVADA.

**School of Agriculture of the Nevada State University, Reno.**

### COURSE OF STUDY.

The regular course requires four years for completion and leads to the degree of B. S. A short course in agriculture is also provided, requiring five months of each year for four years and leading to no degree.

### FACULTY.

S. A. Jones, M. A., Ph. D., *Pres.*; Hannah K. Clapp, M. A., *Precep. and Lib.*; W. McN. Miller, B. S., *Anat., Phys., and Geol.*; R. D. Jackson, Ph. B., *Mining, Metall., and Assaying*; J. Warne Phillips, D. S., *Ch. and Phys.*; F. H. Hillman, M. S., *Ent. and Bot.*; Mrs. Mary W. Emery, *Ped. and Prin. Nor. Sch.*; Robert Lewers, *Pol. Econ. and Commercial Law.*; J. M. Neall, 1st Lient. 4th Cavalry, U. S. A., *Mil. Sci. and Tac., Math., and Mod. Lan.*; R. H. McDowell, B. S., *Ag. and Hort.*; T. W. Cowgill, M. A., *Engl.*; Henry Thurtell, B. S., *Mech. and Mech. Drawing*; Richard Brown, *Supt. Mech. Dept.*

## NEW HAMPSHIRE.

**New Hampshire College of Agriculture and the Mechanic Arts, Hanover.**

### COURSES OF STUDY.

There are five courses of study, each requiring four years for completion, and each leading to the degree of B. S.: Course in agriculture, course in chemistry, course in mechanical engineering, course in electrical engineering, and general course for women.

### FACULTY.

S. C. Bartlett, D. D., LL. D., *Pres.*; C. H. Pettee, M. A., C. E., *Dean, Math. and Civ. Engin.*; H. G. Jesup, M. A., *Nat. Hist.*; C. W. Scott, M. A., *Engl. and Lit.*; G. H. Whiteher, B. S., *Ag.*; C. M. Weed, D. Sc., *Zoöl. and Ent.*; A. H. Wood, B. S. *Assoc. Ag.*; C. L. Parsons, B. S., *Gen. and An. Ch.*; F. W. Morse, B. S., *Org. Ch.*; Albert Kingsbury, M. E., *Mech. Engin.*; G. L. Teeple, M. E., *Instr. Elec. Engin. and Phys.*; E. B. Davis, B. L., *Instr. Mod. Lan.*; C. H. Hitchcock, Ph. D., *Instr. in Geol.*; S. J. Blanpied, M. A., *Instr. Eloc.*; J. N. Brown, *For. Mach. Work*; A. G. Lowell, *For. Woodwork.*

## NEW JERSEY.

**Rutgers Scientific School, New Brunswick.**

### COURSES OF STUDY.

There are six distinct courses of study: A course in agriculture, a course in civil engineering and mechanics, a course in chemistry, a course in electricity, a course in biology, and a winter lecture course in agriculture. Each of the first five requires four years for completion and leads to the degree of B. S.

### FACULTY.

Austin Scott, Ph. D., LL. D., *Pres., Hist. and Pol. Sci.*; T. S. Doolittle, D. D., LL. D., *V. Pres., Rhet., Log., and Men. Ph.*; Carl Meyer, D. D., *Mod. Lan. and Lit.*;

F. C. Van Dyck, Ph. D., *Phys. and Experimental Mech.*; E. A. Bowser, C. E., LL. D., *Math. and Engin.*; C. E. Hart, D. D., *Engl. and Lit.*; Louis Bevier, jr., Ph. D., *Mod. Lan.*; A. A. Titsworth, M. S., C. E., *Graphics and Math.*; Julius Nelson, Ph. D., *Biol.*; B. D. Halsted, D. Sc., *Bot. and Hort.*; J. B. Smith, D. Sc., *Ent.*; E. B. Voorhees, M. A., *Ag.*; W. R. Duryee, *Eth., Evidences of Christianity, and Engl. Bible*; A. H. Chester, M. E., Ph. D., D. Sc., *Ch.*; J. J. Brereton, 1st Lieut. 24th Inf., U. S. A., *Mil. Sci. and Tac.*; J. C. Van Dyke, L. H. D., *Hist. of Art*; I. S. Upson, M. A., *Lib. and Registrar*; R. W. Prentiss, *Assoc. Math. and Astr.*; E. L. Stevenson, Ph. D., *Assoc. Hist.*; C. L. Speyers, Ph. B., *Ch.*; E. T. Middleton, B. S., *Instr. Elec. and Phys.*; E. L. Barbour, *Instr. Elec.*; G. A. Mitchell, B. S., *Asst. in Ch. Lab.*; C. E. Adams, M. D., *Instr. Gym.*; A. Atkinson, C. E., *Instr. Math.*

## NEW MEXICO.

**New Mexico College of Agriculture and Mechanic Arts, Las Cruces.**

### COURSES OF STUDY.

The courses of study are four: A course in science and agriculture, a course in mechanical engineering, a course in civil engineering, and a classical and scientific course.

### FACULTY.

H. Hadley, M. A., *Pres.*; A. E. Blount, M. A., *Hort. and Ag.*; E. O. Wooton, B. S. *Bot.*; Arthur Goss, B. S., A. C., *Ch.*; Cosette Rynerson, *Instru. Music.*; J. P. Owen, *Prin. Prep. Sch. Civics*; C. T. Hagerty, B. S., *Math.*; C. H. Tyler Townsend, *Ent. and Physiol.*; A. J. Weichardt, M. M. E., *Mech. Engin.*; F. F. Barker, *Instr. Lan.*; A. E. Davidson, *1st Asst. Prep. Sch.*

## NEW YORK.

**College of Agriculture of Cornell University, Ithaca.**

### COURSES OF STUDY.

The regular course of study requires four years for completion and leads to the degree of B. S. A post graduate course, leading to the degree of M. S., is provided, and special courses are also arranged.

### FACULTY.

Jacob Gould Schurman, B. A., D. Sc., LL. D., *Pres.*; Geo. C. Caldwell, Ph. D., *Ch.*; James Law, F. R. C. V. S., *Vet., Med., and Surg.*; Albert N. Prentiss, M. S., *Bot., Hort., and Arbor.*; I. P. Roberts, M. Ag., *Ag. and Dean of Coll.*; John H. Comstock, B. S., *Ent. and Zool.*; Henry S. Williams, Ph. D., *Geol. and Pal.*; L. H. Bailey, M. S., *Hort.*; Henry H. Wing, M. S., *Animal Ind. and Dairy Husbandry.*

## NORTH CAROLINA.

**The North Carolina College of Agriculture and Mechanic Arts, Raleigh.**

### COURSES OF STUDY.

The general courses of study are two, each requiring four years for completion: Agricultural course, leading to the degree of B. S. A., and the mechanical course, leading to the degree of B. E.

### FACULTY.

Alexander Q. Holladay, *Pres.*; Jos. R. Chamberlain, B. S., *Ag.*; W. F. Massey, C. E., *Hort., Arbor., and Bot.*; W. A. Withers, M. A., *Ch.*; D. H. Hill, jr., M. A., *Engl. and Bookkeeping.*; J. H. Kinealy, D. E., *Math. and Practical Mech.*; F. E. Emery, B. S., *Ag.*; C. M. Pritchett, *Instr. Mech.*; C. B. Parke, *Asst. Instr. in Mech.*; H. W. Miller, *Instr. Ch.*; R. E. L. Yates, B. A., *Adj. Math.*

## NORTH DAKOTA.

North Dakota Agricultural College, *Fargo*.

## COURSES OF STUDY.

The course in agriculture requires four years for completion and leads to the degree of B. S. In addition to the regular course there is a short course in agriculture and domestic economy, which requires three months in each two consecutive winters for completion.

## FACULTY.

H. E. Stockbridge, Ph. D., *Pres.*; E. F. Ladd, B. S., *Ch.*; T. D. Hinebaugh, M. S., V. S., *Vet. Sci.*; C. B. Waldron, B. S., *Hort. and Forestry*; H. L. Bolley, M. S., *Bot. and Zoöl.*; W. M. Hays, B. S., *Ag.*; Mrs. W. M. Hays, B. D. E., *Dom. Econ.*; H. W. McArdle, B. S., *Instr. Math.*; H. C. Solburg, B. S., *Instr. Mech.*; W. H. Whalen, Ph. B., *Instr. Engl.*; L. B. Hibbard, *Farm Supt.*; Mrs. C. B. Waldron, *Lib.*; W. G. Hayden, *Acc. and Bursar*.

## OHIO.

Ohio State University, *Columbus*.

## COURSES OF STUDY.

The general courses of study are four, requiring four years each for completion, and leading, respectively, to the degrees of B. A., Ph. B., and B. S. There are now two courses leading to the degree of Ph. B.; in one the languages are Latin and French, and in the other German and French are the leading studies. The following technical courses are provided: A course for the degree of B. S. A., requiring four years; a course for the degree of B. S. H., requiring four years; a course for the degree of D. V. M., requiring three years; a course for the degree of C. E., requiring four years; two courses for the degree of M. E., each requiring four years, one in mechanical engineering and one in electrical engineering; a course for the degree of engineer of mines, requiring four years; a course for the degree of graduate in pharmacy, requiring three years; a short course in agriculture, requiring two years; and a short course in mining, requiring two years. Provision is also made for post graduate study leading to degrees, and for preparatory work.

## FACULTY.

W. H. Scott, M. A., LL. D., *Pres.*, *Ph.*; Edward Orton, Ph. D., LL. D., *Geol.*; S. A. Norton, Ph. D., LL. D., *Ch.*; N. S. Townshend, M. D. (*Em.*), *Ag.*; S. W. Robinson, C. E., *Mech. Engin.*; N. W. Lord, M. E., *Min. and Metall.*; S. C. Derby, M. A. (*Lib.*), *Lat.*; W. R. Lazenby, M. Ag., *Hort. and Supt. Grounds*; J. R. Smith, M. A., *Greek*; H. A. Weber, Ph. D., *Ag. Ch.*; B. F. Thomas, Ph. D., *Phys.*; G. W. Knight, Ph. D. (*Sec. Fac.*), *Hist. and Pol. Sci.*; H. J. Detmers, D. V. M., *Vet. Surg.*; R. D. Bohannon, B. S., C. E., M. E., *Math. and Astr.*; D. S. Kellicott, Ph. D., *Zoöl. and Ent.*; C. N. Brown, C. E., *Civ. Engin.*; E. A. Eggers, *Ger.*; Albert M. Bleile, M. D., *Anat. and Physiol.*; Eugene Wilson, 2d Lient. 1st artill., U. S. A., *Mil. Sci. and Tac.*; W. A. Kellerman, Ph. D., *Bot. and Forestry*; Thos. F. Hunt, B. S., *Ag.*; G. B. Kauffman, B. S., *Assoc. Phar.*; Jas. Chalmers, Ph. D., *Assoc. Engl. Lit.*; B. L. Bowen, Ph. D., *Assoc. Rom. Lan. and Lit.*; J. V. Denny, B. A., *Assoc. Rhet.*; G. W. McCoard, M. A., *Math.*; F. W. Sperr, M. E., *Mining Engin.*; J. N. Bradford, M. E., *Drawing*; J. T. Whitney, *Phys.*; G. P. Coler, B. A., *Ph.*; Frederic Keffler, M. E., *Asst. in Ch.*; O. B. Jones, *Asst. Lib.*; C. W. Mesloh, B. A., *Asst. in Ger.*; J. R. Taylor, B. A., *Asst. in Drawing*; W. F. Lavery, D. V. M., *Asst. in Vet. Med.*; A. D. Haines, *Asst. in Mech. Lab.*; C. L. Arnold, B. S., *Asst. in Math.*; C. B. Morrey, B. A., *Asst. in Lat. and Physiol.*; C. A. Dye, Ph. G., *Asst. in Ch. and Phar.*; L. M. Bloomfield, B. Ag., *Asst. in Ag. Ch.*;

W. C. Werner, *Asst. in Bot.*; F. J. Combs, *Asst. in Mech. Lab.*; E. A. Kemmler, C. E., *Asst. in Civ. Engin.*; W. H. Siebert, M. A., *Asst. in Hist. and Pol. Sci.*; H. C. Lord, B. S., *Asst. in Math. and Astr.*; J. E. Boyd, B. S., *Asst. in Phys.*; H. A. Surface, B. S., *Asst. in Geol.*; Martha M. Young, *Asst. in Fr.*

## OKLAHOMA.

**Agricultural and Mechanical College of Oklahoma, Stillwater.**

### COURSE OF STUDY.

The course of study requires four years for completion and leads to the degree of B. S.

### FACULTY.

R. J. Barker, *Pres., Mor. and Men. Sci.*; J. C. Neal, Ph. C., M. D., *Nat. Sci.*; E. F. Clark, *Engl. Lit. and Math.*; A. C. Magruder, B. A., *Ag. and Hort.*; L. J. Darnell, *Tac. and Comt.*; G. L. Holter, B. S., *Ch. and Phys.*

## OREGON.

**Oregon State Agricultural College, Corvallis.**

### COURSES OF STUDY.

The courses of study are three: A course in agriculture, requiring three years for completion and leading to the degree of B. S. A.; a course in mechanical engineering, requiring four years for completion and leading to the degree of B. M. E.; and a course in household economy (for girls) leading to the degree of B. H. E.

### FACULTY.

J. B. Bloss, M. A., *Pres., Men. and Mor. Sci.*; J. D. Letcher, C. E., *Math. and Engin.*; F. Berchtold, M. A., *Mod. Lan., Hist., Drawing and Music*; Margaret Snell, M. D., *Household Econ. and Hyg.*; G. A. Covell, M. S., *Mech. and Mech. Engin.*; F. L. Washburn, B. A., *Zoöl. and Ent.*; H. T. French, M. S., *Ag.*; M. Craig, M. S., *Bot.*; G. W. Shaw, M. A., *Ch.*; George Coote, *Instr. Hort.*; W. W. Bristow, B. A., *Prin. Prep. Dept. and Prof. Bookkeeping*; D. Lotz, M. D., *Ch.*; C. D. Thompson, B. A., *For. Ag. Dept.*; E. M. Belknap, *Engin. and Instr. in Wood and Metal Work.*

## PENNSYLVANIA.

**Pennsylvania State College, State College.**

### COURSES OF STUDY.

The courses of study are as follows, each requiring four years for completion unless otherwise specified: General science course; Latin scientific course; course in agriculture; course in chemistry; course in physics and electrotechnics; course in civil engineering; course in mechanical engineering; course in natural history; course in mechanic arts, requiring three years; ladies' course in literature and science, requiring two years; and special course in chemistry, requiring two years for completion. The four years' courses lead to the degree of B. S., the diploma containing mention of line of work pursued. Provision is also made for post graduate study, leading to advanced degrees, and for preparatory work.

### FACULTY.

George W. Atherton, LL. D., *Pres., Pol. and Soc. Sci.*; W. A. Buckhout, M. S., *Bot. and Hort.*; I. Thornton Osmond, M. S., M. A., *Phys.*; Josiah Jackson, M. A., *Math.*; L. H. Barnard, C. E., *Civ. Engin.*; H. A. McElwain, M. A., *Lady Prin., Hist.*; L. E. Reber, M. S., *Mech. and Mech. Engin.*; William Frear, Ph. D., *Ag. Ch.*; G. G. Pond, M. A., Ph. D., *Ch.*; E. F. Davis, M. A., *Engl. and Rhet.*; S. A. Wolf, 1st Lieut. 4th Inf., U. S. A., *Mil. Sci. and Tac.*; H. P. Armsby, Ph. D., *Lect. An. Ch. and Cattle*

*Feeding*; John Pemberton, C. E., U. S. N., *Asst. Mech. Engin.*; H. T. Fernald, M. S., Ph. D., *Asst. Zoöl.*; C. H. Kinne, B. A., Ph. D., *Fr., Ger., and Spanish*; E. E. Sparks, B. A., *Prin. Prep. Dept.*; G. C. Butz, M. S., *Asst. Bot. and Hort.*; W. H. Caldwell, B. S., *Instr. Ag.*; F. E. Tuttle, B. A., *Instr. Ch. and Min.*; Jennie J. Willard, *Instr. Music*; G. M. Downing, B. S., *Asst. Phys. Lab.*; J. H. Root, B. S., *Instr. Math.*; T. R. Beyer, B. S., C. E., *Instr. Civ. Engin.*; C. G. Roop, M. A., *Instr. Prep. Dept. Engl. and Lat.*; M. J. Thompson, B. A., *Instr. Prep. Dept. Math.*; Anna E. Redifer, *Instr. Ind. Art and Design.*

## RHODE ISLAND.

**Brown University, Providence.**

### COURSES OF STUDY.

The courses of study are four, each requiring four years for completion: The course for the degree of B. A., the course for the degree of Ph. B., the course for the degree of B. S., and the course for the degree of C. E. Studies in agriculture, forming a portion of the work of the fourth year, are required of students appointed to scholarships afforded by the income of the national grant.

### FACULTY.

E. B. Andrews, D. D., LL. D., *Pres., Mor. and Intel. Ph.*; Albert Harkness, Ph. D., LL. D., *Greek*; B. F. Clark, M. A., *Math. and Civ. Engin.*; J. H. Appleton, M. A., *Ch.*; E. W. Blake, M. A., *Phys.*; J. W. P. Jenks, M. A., *Ag. Zoöl., Curator of Mus.*; Alonzo Williams, M. A., *Mod. Lan.*; W. C. Poland, M. A., *Assoc. Greek, Curator Mus. Clas. Archæ.*; A. S. Packard, Ph. D., *Zoöl. and Geol.*; N. F. Davis, M. A., *Pure Math.*; W. W. Bailey, B. P., *Bot.*; Winslow Upton, M. A., *Astr. and Dir. Observatory*; C. V. Chapin, M. D., *Physiol. and Dir. Phys. Culture*; J. F. Jameson, Ph. D., *Hist.*; W. C. Bronson, M. A., *Engl. Lit.*; A. G. Harkness, M. A., *Assoc. Lat.*; H. B. Gardner, Ph. D., *Pol. Econ.*; J. M. Manly, Ph. D., *Assoc. Engl. Lan. and Lit.*; G. G. Wilson, Ph. D., *Assoc. Pol. and Soc. Sci.*; W. G. Everett, M. A., *Instr. Lat. and Greek*; H. P. Manning, Ph. D., *Instr. Math.*; F. T. Guild, M. A., *Sec. Fac.*; E. H. Brownell, *Instr. Civ. Engin.*; H. C. Bumpus, Ph. D., *Comp. Anat. and Asst. Cur. Mus.*; Courtney Langdon, B. A., *Assoc. Mod. Lan.*; L. Lewis, M. A., *Rhet.*; C. E. Bennett, B. A., *Clas. Phil. and Sanskrit*; W. H. Munro, M. A., *Assoc. Hist. and Dir. Univ. Extension*; O. E. Randall, M. A., *Assoc. Mech. Drawing*; J. R. Jewett, Ph. D., *Assoc. Semitic Lan.*; E. B. Delabarre, *Psys.*; E. E. Calder, *Instr. Ch.*; L. F. Snow, M. A., *Instr. Eloc.*; W. D. Mernul, M. E., *Instr. Practical Phys.*; J. L. Bennett, B. A., *Cur. Herbaria and Mus. Econ. Bot.*; A. C. Crowell, M. A., *Instr. Fr. and Ger.*; A. Scott, M. A., *Instr. Ger.*; A. T. Swift, M. A., *Instr. Ger.*; W. M. Saunders, *Instr. Ch.*; J. F. Greene, B. A., *Instr. Graphics*; E. G. Dexter, B. P., *Instr. Civ. Engin.*; S. S. Colvin, B. P., *Instr. Engin.*; F. E. Parker, B. A., *Instr. Phys. Culture*; C. E. Wilson, B. S., *Instr. Ch.*

**Rhode Island College of Agriculture and Mechanic Arts, Kingston.**

### COURSE OF STUDY.

The course of study in agriculture requires three years for completion and leads to the degree of B. Ag. Partial courses and a winter course are also provided.

### FACULTY.

J. H. Washburn, Ph. D., *Prin., Ch.*; C. O. Flagg, B. S., *Ag.*; F. E. Rice, M. D., M. R. C. V. S., *Physiol., Zoöl., and Vet. Sci.*; L. F. Kinney, B. S., *Hort. and Bot.*; H. J. Wheeler, Ph. D., *Geol.*; Samuel Cushman, *Lect. on Bee Keeping*; Miss Serena Stockbridge, *Instr. in Engl., Fr., and Lat.*; T. C. Rodman, *Instr. in Wood and Iron Work*; F. A. Lane, *Instr. in Mech. Drawing and Ass't Instr. in Woodwork*; Miss Jennie Hammond, *Instr. in Drawing*; B. L. Hartwell, *Instr. in Music*; Mrs. F. G. Pratt, *Matron*; H. F. Adams, *Farm Supt.*

## SOUTH CAROLINA.

**Clemson Agricultural College, Fort Hill.**

The College of Agriculture and Mechanic Arts has been removed from Columbia to Fort Hill, but owing to the failure on the part of the legislature to make an appropriation sufficient to complete the buildings, the college has not as yet been opened.

**Clafin University, College of Agriculture and Mechanics' Institute, Orangeburg.**

## COURSES OF STUDY.

The regular courses of study are ten: The college classical course, requiring four years and leading to the degree of B. A.; the college scientific course, requiring three years and leading to the degree of B. S.; the college philosophical course, requiring three years and leading to the degree of Ph. B.; the college preparatory course and the normal course, each requiring three years and leading to a diploma; the English course, requiring six years and leading to a certificate; a kindergarten course, requiring one year and leading to a certificate; an English Bible course, requiring four years and leading to a certificate; a music course, requiring four years and leading to a certificate; and an art course, requiring three years and leading to a certificate. Twenty industrial courses are also provided to be pursued in connection with the courses above.

## FACULTY.

L. M. Dunton, M. A., D. D., *Pres.*; J. S. Heyward, M. A., *Nat. Sci.*; Mrs. L. M. Dunton, M. A., *Precep., Rhet., Lit., and Fr.*; W. L. Bulkley, M. A., *Greek, Lat., and Ger.*; Mortimer Glover, B. A., *Hist. and Pol. Sci.*; C. D. Mead, M. A., *Ped. and Instr. in Voc. Music.*; P. F. Stevens, D. D., *Math. and Instr. in Engl. Bible*; Henry Pearson, B. A., *Adj. Greek, Lat., and Lit.*; Mrs. C. D. Mead, *Instr. Music.*

## SOUTH DAKOTA.

**South Dakota Agricultural College, Brookings.**

## COURSES OF STUDY.

The courses of study are four: A course in agriculture; a course in domestic economy; a course in mechanic arts, and a course in pharmacy. The first three require four years for completion and lead to the degree of B. S.; the last requires two years and leads to no degree.

## FACULTY.

Lewis McLouth, M. A., Ph. D., *Pres., Astr. and Phys.*; S. P. Lapham, *Music*; Luther Foster, M. S. A., *Ag.*; R. F. Kerr, M. A., *Hist. and Pol. Econ.*; I. H. Orcutt, M. D., Ph. D., *Zoöl., Geol. and Physiol.*; J. C. Whitten (*Act.*), *Forestry, and Hort.*; Nellie E. Folsom, B. S., *Precep., Instr. Lan.*; J. H. Shepard, M. A., *Ch. and Asst. Phys.*; Peter Leary, jr., Capt. 4th Artill., U. S. A., *Mil. Sci. and Tac.*; W. H. H. Philips, M. A., Ph. D., *Math.*; G. E. Dawson, B. A., *Engl. Lan. and Lit.*; W. S. Frost, LL. B., *Civil Gov., Commercial Law, and Bookkeeping*; Lilla A. Harkins, B. S., *Dom. Econ.*; A. H. Wheaton, *Instr. Dairy Sci.*; H. C. Solberg, *Instr. Wood Shop Work and Mech. Drawing*; J. M. Aldrich, B. S., *Asst. in Zoöl.*; C. G. Hopkins, B. S., *Asst. in Ch.*; Mary O. Lapham, *Asst. in Music.*; T. A. Williams, M. S., *Act. Bot.*; C. R. Waters, M. A., *Asst. in Math.*; Nellie E. Berkey, *Instr. in Free-Hand Drawing and Wood Carving*; W. G. Cope-land, *For. Farm*; W. H. Murphy, *For. Gardens*; A. W. Williams, *Herds.*; Marcus Johnson, *Instr. Forging, Engin. and Steam Fitter.*

## TENNESSEE.

**State Agricultural and Mechanical College of the University of Tennessee,**  
*Knoxville.*

### COURSES OF STUDY.

The courses of study are six: General course, course in agriculture, course in civil engineering, course in mechanical engineering, course in electrical engineering, and course in mining engineering. The degrees of B. A. and B. S. are conferred.

### FACULTY.

C. W. Dabney, jr., Ph. D., LL. D., *Pres., Ch.*; W. W. Carson, C. E., *Civ. Engin.*; F. Lamson-Scribner, B. S., *Bot. and Hort.*; C. E. Wait, C. E., M. E., *Ch.*; T. W. Jordan, M. A., *Lat.*; C. W. Kent, M. A., Ph. D., *Engl. and Ger.*; T. F. Burgdorff (P. A. Engin., U. S. N.), *Mech. Engin.*; C. F. Vanderford, *Ag.*; F. R. Jones, M. E., *Mech. Arts.*; F. M. Smith, *Hist. of Education and Ped.*; L. D. Tyson, 1st Lieut., 9th Inf., U. S. A., *Mil. Sci. and Tac.*; T. C. Karns, M. A., *Assoc. Engl. Lit., Hist., and Ph.*; C. D. Schmitt, M. A., *Assoc. Math.*; G. F. Mellen, Ph. D., *Assoc. Greek and Fr.*; Chas. A. Perkins, Ph. D., *Phys. and Elec. Engin.*; P. L. Cobb, *Instr. Lat.*; S. W. McCallie, *Instr. Geol. and Zoöl.*; J. R. McColl, B. S., *Instr. in Mech.*; E. MacDavis, B. A., *Instr. in Engl.*; P. F. Kefauver, *Instr. Ag.*; R. L. Watts, B. A., *Instr. Bot. and Hort.*; J. D. Hoskins, *Instr. Math.*; C. C. Moore, jr., B. S., *Instr. Ch. and Math.*; W. N. Price, B. S., *Instr. Lan. and Lit.*; H. K. Denlinger, B. A., *Instr. Phys. Culture.*

## TEXAS.

**State Agricultural and Mechanical College of Texas, College Station.**

### COURSES OF STUDY.

The courses of study are two, each extending through four years: The agricultural course, leading by specialization of studies either to the degree of B. S. H. or to the degree of B. S. A., and the mechanical course, leading in a similar way to the degree of B. C. E. or to the degree of B. M. E. Post graduate and special courses are also provided.

### FACULTY.

L. S. Ross, *Pres.*; W. L. Bringhurst, Ph. D., *V. Pres., Engl. and Hist.*; R. H. Whitlock, M. E., *Mech. Engin.*; G. W. Curtis, M. S. A., *Ag.*; H. H. Harrington, M. S., *Ch. and Min.*; C. Puryear, M. A., C. E., *Math.*; E. E. Bramlette, M. A., *Lan.*; B. C. Morse, 1st Lieut. 18th Inf., U. S. A., *Mil. Sci. and Comt.*; Mark Francis, D. V. M., *Vet. Sci.*; F. E. Giesecke, M. E., *Assoc. Drawing*; J. C. Nagle, B. S., *Assoc. Civ. Engin. and Phys.*; R. F. Smith, *Assoc. Math.*; A. L. Banks, *Adj. Math.*; W. B. Philpott, M. S., *Engl.*; J. M. Carson, *Ag.*; P. S. Tilson, *Ch. and Min.*; Helge Ness, B. S., *Hort. and Bot.*; A. M. Guenther, *Instr. Blacksmith and For. Mach. Shop*; T. C. Bittle, *Chaplain and Lib.*; A. C. Gillespie, M. D., *Surg.*; J. H. Carter, *Sec.*; E. W. Hutchinson, B. C. E., *Bookkeeping*; Bernard Shisa, *Steward*; C. A. Lewis, *For. Carpenter Shop*; J. H. Alsworth, *For. Farm*; Jas. B. Watts, *Stockman*; G. E. Eberspacher, *For. Garden and Greenhouse.*

## UTAH,

**Agricultural College of Utah, Logan.**

### COURSES OF STUDY.

The college work includes five distinctive lines of instruction: Course in agriculture, course in domestic arts, course in mechanic arts, course in civil engineering, business course, four special courses, two years' course in agriculture, two years'

course in domestic arts, course in mining engineering, irrigation engineering, and a preparatory department. In addition to these special courses there have been organized two courses of winter lectures covering ten weeks each: A course of agricultural lectures and a course of lectures for the domestic arts department. The courses in mechanical and in mining and irrigation engineering will be post graduate courses of one year each.

#### FACULTY.

J. W. Sanborn, B. S., *Pres., Ag.*; E. S. Richman, M. S. A., *Hort. and Bot.*; W. P. Cutter, B. S., *Ch.*; Abbie L. Marlatt, M. S., *Dom. Econ.*; J. M. Sholl, B. M. E., *Mech. Engin.*; H. L. Everett, M. A., *Engl. and Mod. Lan.*; J. T. Caine, jr., *Instr. Prep. Dept.*; A. A. Mills, B. S., *Ag.*; Mrs. Sarah G. Goodwin, *Instr. in Music.*

### VERMONT.

**University of Vermont and State Agricultural College, Burlington.**

#### COURSES OF STUDY.

In the department of agriculture the courses of study are four: The agricultural course, requiring four years and leading to a degree; a short course in agriculture, requiring two years; a winter school of agriculture, occupying eleven weeks of the winter; and a winter course of lectures to farmers, without fee for tuition.

#### FACULTY.

M. H. Buckham, D. D., *Pres., Pol. and Soc. Ph.*; V. G. Barbour, Ph. B., C. E., *Civ. Engin.*; G. H. Perkins, Ph. D., *Nat. Hist.*; J. K. Chickering, M. A., *Engl. Lan. and Lit., and Eloc.*; N. F. Merrill, Ph. D., *Ch.*; A. L. Daniels, D. S., *Math. and Phys.*; J. W. Votey, C. E., *Civ. Engin.*; Horatio Loomis, *Ch.*; W. W. Cooke, M. A., *Ag.*; L. J. Huff, *Mod. Lan.*; H. S. Foster, Capt. 20th Inf., U. S. A., *Mil. Tac.*; F. M. Corse, *Instr. Math.*; L. R. Jones, Ph. B., *Assoc. Nat. Hist.*; C. W. Minott, B. S., *Instr. Hort.*; J. L. Hills, B. S., *Instr. Ch.*; A. W. Ayer, *Instr. Mech. Engin.*; F. A. Rich, *Instr. Vet. Sci.*

### VIRGINIA.

**Virginia Agricultural and Mechanical College, Blacksburg.**

#### COURSES OF STUDY.

The courses of study are three, each requiring four years for completion and leading to the degree of B. S.: Agricultural course, mechanical course, and general science course. There are also two courses which require two years for completion and lead to a certificate of practical agriculture and practical mechanics.

#### FACULTY.

J. M. McBryde, Ph. D., LL. D., *Pres., Ag. Ch.*; J. E. Christian, M. A., *Math. and Civ. Engin.*; J. H. Fitts, *Mech. Engin.*; W. B. Alwood, *Hort., Ent., and Myc.*; E. E. Sheib, Ph. D., *Engl. Hist. and Pol. Econ.*; E. A. Smyth, jr., M. A., *Biol.*; T. P. Campbell, *Adj. Mod. Lan.*; W. E. Anderson, *Adj. Phys. and Elec. Engin., and Dir. Shops*; R. C. Price, *Adj. Ch., Min., and Geol.*; D. O. Nourse, B. S., *Adj. Ag.*; J. A. Harman, 2d Lieut. 7th Cavalry, U. S. A., *Asst. Math., Mil. Sci. and Tac.*; R. J. Davidson, M. A., *Adj. An. Ch.*; E. P. Niles, D. V. M., *Adj. Vet. Sci.*; W. W. Hurt, *Instr. Math. and Bookkeeping*; W. N. Cunningham, *Instr. Ironwork*; R. T. Bray, *Instr. Woodwork*; J. Gardner, *Treas.*; A. W. Drinkhard, *Lib.*

## Hampton Normal and Agricultural Institute, *Hampton.*

### COURSE OF STUDY.

The course of study requires three years for completion and leads to no degree.

### FACULTY.

S. C. Armstrong, LL. D., *Prin., Study of Man and Ag. Topics*; Rev. H. B. Frissell, *Pastor and V. Prin., Civ. Gov., Bible Lessons*; F. N. Gilman, *Treas.*; F. C. Briggs, *Business Agt.*; Martha M. Waldron, M. D., *Resident Physician*; Leonora E. Herron, *Lib.*; Mabel W. Dillingham, *Asst. Lib.*; Elizabeth Clark, *Lady Prin., Math.*; Elizabeth Hyde, *in Charge Acad. Dept.*; Josephine Richards, *in Charge of Indian Dept.*; Susan Showers, *in Charge of Night School*; Helen W. Ludlow, *Engl. Lit.*; Dora Freeman, *Reading*; Myrtilla J. Sherman, *Gram. and Comp.*; Jane E. Davis, *Math. and Nat. Ph.*; Jane S. Worcester, *Hist. and Geog.*; Alice M. Bacon, *Civ. Gov. and Pol. Econ.*; Catherine Condell, *Writing and Arithmetic*; Jessie Andrus, *Gram. and Physiol.*; Mary Rose, *Nat. Hist. and Physiol.*; Mary R. Hamlin, *Geog.*; Cora L. Moore, *Writing*; Emma Johnston, *Arithmetic*; Mary Nettleton, *Methods*; Ida Wilde, *Drawing*; Annie Scovelle, *Bible and Hist.*; Mercie A. Allen, *Arithmetic*; F. G. Rathbun, *Music*; Cora Butler, *Singing*; Flora F. Lowe, *Arithmetic and Gram.*; Vincintine Booth, *Reading, Lan., and Arithmetic*; Alice Boardman, *Reading and Arithmetic*; Hattie Nettleton, *Reading and Arithmetic*; Marian Metcalf, *Bible and Reading*.

## WASHINGTON.

### Washington Agricultural College and School of Science, *Pullman.*

### COURSES OF STUDY.

The courses of study are four: The course in agriculture, the course in domestic science, the course in mechanic arts, and the course in pharmacy.

### FACULTY.

George Lilley, M. A., Ph. D., LL. D., *Pres., Math. and Phys.*; J. O'B. Scobey, M. A., *Ag.*; E. R. Lake, M. S., *Hort., Forestry, and Bot.*; C. E. Munn, V. S., *Vet. Sci.*; G. G. Hitchcock, B. A., *Ch.*; Mrs. Nancy L. Van Doren, *Precep. and Engl.*

## WEST VIRGINIA.

### West Virginia University, *Morgantown.*

### COURSES OF STUDY.

The courses of study are five, each requiring four years for completion: Classical course, leading to the degree of B. A.; scientific course, leading to the degree of B. S.; course in mechanical engineering, leading to the degree of B. S. M. E.; course in civil engineering, leading to the degree B. S. C. E.; and a course in agriculture, leading to the degree of B. Ag. There is also a department of law, in which the degree of LL. B. is given. Post graduate work and preparatory work are also provided.

### FACULTY.

E. M. Turner, LL. D., *Pres., Pol. Econ.*; P. B. Reynolds, D. D., *V. Pres., Meta.*; R. C. Berkeley, M. A., LL. D., *Anc. Lan. and Lit.*; J. I. Harvey, M. A., Ph. D., *Mod. Lan. and Lit.*; I. C. White, M. A., Ph. D., *Geol.*; A. W. Lorentz, M. A., *Prin. Prep. Dept.*; St. G. T. Brooke, LL. D., *Commercial and Statute Law*; W. P. Willey, M. A., *Eq. Juris. and Hist.*; A. R. Whitehill, Ph. D., *Ag., Ch., and Phys.*; J. W. Hartigan, M. A., M. D., D. Sc., *Biol.*; F. D. W. Ramsey, Lieut. 9th Inf., U. S. A., *Mil. Sci. and Tac.*;

H. P. Davenport, jr., *Civ. and Mining Engin.*; J. A. Myers, Ph. D., *Dir. Expt. Sta.*; T. C. Atkeson, Ph. B., *Ag.*; F. L. Emory, B. S., *Man. Train. and Meeh. Engin.*; J. L. Johnston, C. E., *Math. and Drawing*; H. N. Ogden, M. A., *Engl.*; J. S. Stewart, M. S., *Math.*; A. J. Hare, B. A., *Asst. in Prep. Greek and Lat.*; B. C. Alderson, B. A., *Asst. in Anc. Lan.*; S. B. Brown, M. A., *Asst. in Geol.*; E. H. Vickers, B. A., *Asst. in Math.*; J. E. Davis, B. A., *Asst. Prep. Dept.*; Miss Clara Hough, *Lib.*

## WISCONSIN.

**College of Agriculture of the University of Wisconsin, Madison.**

### COURSE OF STUDY.

The course of study in the College of Agriculture requires four years, leading to the degree of B. Ag.

### FACULTY.

T. C. Chamberlin, Ph. D., LL. D., *Pres.*; W. A. Henry, B. Ag., *Dean., Ag., and Dir. Expt. Sta.*; S. M. Babcock, Ph. D., *Ag. Ch. and Ch. in Expt. Sta.*; F. H. King, *Ag. Phys.*; E. S. Goff, *Hort. and Econ. Ent.*; W. H. Morrison, *Supt. Farmers' Inst.*; F. W. Woll, M. S., *Asst. Ch.*; J. A. Craig, B. S. A., *Animal Husbandry*; A. W. Richter, M. E., *Instr. Engin.*; C. A. Woodford, *Diseases of Dairy Cows*; J. W. Decker, B. Ag., *Instr. in Cheese Making*; G. W. Brasure, *1st Asst. in Cheese Making*; M. Michels, *2nd Asst. in Cheese Making*; H. J. Noyes, *Instr. in Butter Making*; J. Seaman, *1st Asst. in Butter Making*; F. H. Worthington, *Asst. Dairy Lab.*; Leslie H. Adams, *Farm Supt.*

## WYOMING.

**College of Agriculture of the University of Wyoming, Laramie.**

### COURSE OF STUDY.

The course of study in the department of agriculture requires four years for completion, leading to the degree of B. Ag.

### FACULTY.

A. A. Johnson, M. A., D. D., *Pres., Pol. Sci.*; J. D. Conley, Ph. D., *Phys. and Geol.*; W. I. Smith, M. A., *Rhet. and Engl. Lit.*; A. M. Sawin, M. S., *Math. and Astr.*; B. C. Buffum, B. S., *Bot. and Hort.*; L. C. Colburn, B. S., *Mech. Engin.*; D. L. Howell, Lieut. 7th Inf., U. S. A., *Mil. Sci. and Tac.*; E. E. Slosson, B. S., *Instr. Ch.*; Miss Cora M. McDonald, *Instr. Hist.*; F. J. Niswander, B. S., *Ent. and Zoöl.*

OFFICERS OF THE ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES  
AND EXPERIMENT STATIONS.

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*ELECTED AT CHAMPAIGN, ILLINOIS, NOVEMBER, 1890.*

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*Vice Presidents,*

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| Chemistry, A. T. NEALE of Delaware;  | Horticulture, E. S. GOFF of Wisconsin.        |

*ELECTED AT WASHINGTON, D. C., AUGUST, 1891.*

*President,*

W. L. BROUN of Alabama.

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Chemistry, H. H. HARRINGTON of Texas; Horticulture, T. L. BRUNK of Maryland;

OFFICERS AND REPORTERS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS OF THE UNITED STATES.

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*ELECTED AT WASHINGTON, AUGUST, 1891,*

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*Vice President,*

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| Soils and ash, H. H. HARRINGTON, of Texas;  | Sugar, B. B. ROSS of Louisiana.                                           |
| Dairy products, S. M. BABCOCK of Wisconsin; |                                                                           |

## FEDERAL LEGISLATION AFFECTING AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

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### *ACT OF 1862 DONATING LANDS FOR AGRICULTURAL COLLEGES.*

AN ACT donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there be granted to the several States, for the purposes hereinafter mentioned, an amount of public land, to be apportioned to each State a quantity equal to thirty thousand acres for each Senator and Representative in Congress to which the States are respectively entitled by the apportionment under the census of eighteen hundred and sixty: *Provided,* That no mineral lands shall be selected or purchased under the provisions of this act.

SEC. 2. That the land aforesaid, after being surveyed, shall be apportioned to the several States in sections or subdivisions of sections, not less than one quarter of a section; and whenever there are public lands in a State subject to sale at private entry at one dollar and twenty-five cents per acre, the quantity to which said State shall be entitled shall be selected from such lands within the limits of such State, and the Secretary of the Interior is hereby directed to issue to each of the States in which there is not the quantity of public lands subject to sale at private entry at one dollar and twenty-five cents per acre, to which said State may be entitled under the provisions of this act, land scrip to the amount in acres for the deficiency of its distributive share: said scrip to be sold by said States and the proceeds thereof applied to the uses and purposes prescribed in this act, and for no other use or purpose whatsoever: *Provided,* That in no case shall any State to which land scrip may thus be issued be allowed to locate the same within the limits of any other State, or of any Territory of the United States, but their assignees may thus locate said land scrip upon any of the unappropriated lands of the United States subject to sale at private entry at one dollar and twenty-five cents, or less, per acre: *And provided, further,* That not more than one million acres shall be located by such assignees in any one of the States: *And provided, further,* That no such location shall be made before one year from the passage of this act.

SEC. 3. That all the expenses of management, superintendence, and taxes from date of selection of said lands, previous to their sales, and all expenses incurred in the management and disbursement of the moneys which may be received therefrom, shall be paid by the States to which they belong, out of the Treasury of said States, so that the entire proceeds of the sale of said lands shall be applied without any diminution whatever to the purposes hereinafter mentioned.

SEC. 4. That all moneys derived from the sale of the lands aforesaid by the States to which the lands are apportioned, and from the sales of land scrip hereinbefore provided for, shall be invested in stocks of the United States, or of the States, or some other safe stocks, yielding not less than five per centum upon the par value of said stocks; and that the moneys so invested shall constitute a perpetual fund, the capital of which shall remain forever undiminished (except so far as may be

provided in section fifth of this act), and the interest of which shall be inviolably appropriated, by each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.

SEC. 5. That the grant of land and land scrip hereby authorized shall be made on the following conditions, to which, as well as the provisions hereinbefore contained, the previous assent of the several States shall be signified by legislative acts:

First. If any portion of the fund invested, as provided by the foregoing section, or any portion of the interest thereon, shall, by any action or contingency, be diminished or lost, it shall be replaced by the State to which it belongs, so that the capital of the fund shall remain forever undiminished; and the annual interest shall be regularly applied without diminution to the purposes mentioned in the fourth section of this act, except that a sum, not exceeding ten per centum upon the amount received by any State under the provisions of this act, may be expended for the purchase of lands for sites or experimental farms, whenever authorized by the respective legislatures of said States.

Second. No portion of said fund, nor the interest thereon, shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation, or repair of any building or buildings.

Third. Any State which may take and claim the benefit of the provisions of this act shall provide, within five years, at least not less than one college, as described in fourth section of this act, or the grant to such State shall cease; and said State shall be bound to pay the United States the amount received of any lands previously sold, and that the title to purchasers under the State shall be valid.

Fourth. An annual report shall be made regarding the progress of each college, recording any improvements and experiments made, with their cost and results, and such other matters, including State industrial and economical statistics, as may be supposed useful; one copy of which shall be transmitted by mail free, by each, to all the other colleges which may be endowed under the provisions of this act, and also one copy to the Secretary of the Interior.

Fifth. When lands shall be selected from those which have been raised to double the minimum price, in consequence of railroad grants, they shall be computed to the States at the maximum price, and the number of acres proportionally diminished.

Sixth. No State while in a condition of rebellion or insurrection against the Government of the United States shall be entitled to the benefit of this act.

Seventh. No State shall be entitled to the benefits of this act unless it shall express its acceptance thereof by its legislature within two years from the date of its approval by the President.

SEC. 6. That land scrip issued under the provisions of this act shall not be subject to location until after the first day of January, one thousand eight hundred and sixty-three.

SEC. 7. That the land officers shall receive the same fees for locating land scrip issued under the provisions of this act as is now allowed for the location of military bounty land warrants under existing laws: *Provided*, Their maximum compensation shall not be thereby increased.

SEC. 8. That the governors of the several States to which scrip shall be issued under this act shall be required to report annually to Congress all sales made of such scrip until the whole shall be disposed of, the amount received for the same, and what appropriation has been made of the proceeds

Approved, July 2, 1862.

ACT OF 1887 ESTABLISHING AGRICULTURAL EXPERIMENT STATIONS.

AN ACT to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July second, eighteen hundred and sixty-two, and of the acts supplementary thereto.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established, under direction of the college or colleges or agricultural department of colleges in each State or Territory established, or which may hereafter be established, in accordance with the provisions of an act approved July second, eighteen hundred and sixty-two, entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," or any of the supplements to said act, a department to be known and designated as an "agricultural experiment station:" *Provided,* That in any State or Territory in which two such colleges have been or may be so established the appropriation hereinafter made to such State or Territory shall be equally divided between such colleges, unless the legislature of such State or Territory shall otherwise direct.

SEC. 2. That it shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States or Territories.

SEC. 3. That in order to secure, as far as practicable, uniformity of methods and results in the work of said stations, it shall be the duty of the United States Commissioner of Agriculture to furnish forms, as far as practicable, for the tabulation of results of investigation or experiments; to indicate, from time to time, such lines of inquiry as to him shall seem most important; and, in general, to furnish such advice and assistance as will best promote the purposes of this act. It shall be the duty of each of said stations annually, on or before the first day of February, to make to the governor of the State or Territory in which it is located a full and detailed report of its operations, including a statement of receipts and expenditures, a copy of which report shall be sent to each of said stations, to the said Commissioner of Agriculture, and to the Secretary of the Treasury of the United States.

SEC. 4. That bulletins or reports of progress shall be published at said stations at least once in three months, one copy of which shall be sent to each newspaper in the States or Territories in which they are respectively located, and to such individuals actually engaged in farming as may request the same, and as far as the means of the station will permit. Such bulletins or reports and the annual reports of said stations shall be transmitted in the mails of the United States free of charge for postage, under such regulations as the Postmaster-General may from time to time prescribe.

SEC. 5. That for the purpose of paying the necessary expenses of conducting investigations and experiments and printing and distributing the results as hereinbefore

described, the sum of fifteen thousand dollars per annum is hereby appropriated to each State, to be specially provided for by Congress in the appropriations from year to year, and to each Territory entitled under the provisions of section eight of this act, out of any money in the Treasury proceeding from the sales of public lands, to be paid in equal quarterly payments, on the first day of January, April, July, and October in each year, to the treasurer or other officer duly appointed by the governing boards of said colleges to receive the same, the first payment to be made on the first day of October, eighteen hundred and eighty-seven: *Provided, however,* That out of the first annual appropriation so received by any station an amount not exceeding one fifth may be expended in the erection, enlargement, or repair of a building or buildings necessary for carrying on the work of such station; and thereafter an amount not exceeding five per centum of such annual appropriation may be so expended.

SEC. 6. That whenever it shall appear to the Secretary of the Treasury from the annual statement of receipts and expenditures of any of said stations that a portion of the preceding annual appropriation remain unexpended, such amount shall be deducted from the next succeeding annual appropriation to such station, in order that the amount of money appropriated to any station shall not exceed the amount actually and necessarily required for its maintenance and support.

SEC. 7. That nothing in this act shall be construed to impair or modify the legal relation existing between any of the said colleges and the government of the State, or Territories in which they are respectively located.

SEC. 8. That in States having colleges entitled under this section to the benefits of this act and having also agricultural experiment stations established by law separate from said colleges, such States shall be authorized to apply such benefits to experiments at stations so established by such States; and in case any State shall have established under the provisions of said act of July second, aforesaid, an agricultural department or experimental station, in connection with any university, college, or institution not distinctively an agricultural college or school, and such State shall have established or shall hereafter establish a separate agricultural college or school, which shall have connected therewith an experimental farm or station, the legislature of such State may apply in whole or in part the appropriation by this act made to such separate agricultural college or school, and no legislature shall by contract express or implied disable itself from so doing.

SEC. 9. That the grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purposes of said grants: *Provided,* That payment of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of its legislature meeting next after the passage of this act shall be made upon the assent of the governor thereof duly certified to the Secretary of the Treasury.

SEC. 10. Nothing in this act shall be held or construed as binding the United States to continue any payment from the Treasury to any or all the States or institutions mentioned in this act, but Congress may at any time amend, suspend, or repeal any or all the provisions of this act.

Approved, March 2, 1887.

#### *ACT OF 1890 FOR THE FURTHER ENDOWMENT OF AGRICULTURAL COLLEGES.*

AN ACT to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts established under the provisions of an act of Congress approved July second, eighteen hundred and sixty-two.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there shall be, and hereby is, annually appropriated, out of any money in the Treasury not otherwise appropriated, arising from the sales of public lands, to be paid as hereinafter provided to each State and Territory for the more complete endowment and maintenance of colleges for the benefit of agriculture

and the mechanic arts now established, or which may be hereafter established, in accordance with an act of Congress approved July second, eighteen hundred and sixty-two, the sum of fifteen thousand dollars for the year ending June thirtieth, eighteen hundred and ninety, and an annual increase of the amount of such appropriation thereafter for ten years by an additional sum of one thousand dollars over the preceding year, and the annual amount to be paid thereafter to each State and Territory shall be twenty-five thousand dollars to be applied only to instruction in agriculture, the mechanic arts, the English language and the various branches of mathematical, physical, natural and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction: *Provided*, That no money shall be paid out under this act to any State or Territory for the support and maintenance of a college where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such colleges separately for white and colored students shall be held to be a compliance with the provisions of this act if the funds received in such State or Territory be equitably divided as hereinafter set forth: *Provided*, That in any State in which there has been one college established in pursuance of the act of July second, eighteen hundred and sixty-two, and also in which an educational institution of like character has been established, or may be hereafter established, and is now aided by such State from its own revenue, for the education of colored students in agriculture and the mechanic arts, however named or styled, or whether or not it has received money heretofore under the act to which this act is an amendment, the Legislature of such State may propose and report to the Secretary of the Interior a just and equitable division of the fund to be received under this act between one college for white students and one institution for colored students established as aforesaid, which shall be divided into two parts and paid accordingly, and thereupon such institution for colored students shall be entitled to the benefits of this act and subject to its provisions, as much as it would have been if it had been included under the act of eighteen hundred and sixty-two, and the fulfillment of the foregoing provisions shall be taken as a compliance with the provision in reference to separate colleges for white and colored students.

SEC. 2. That the sums hereby appropriated to the States and Territories for the further endowment and support of colleges shall be annually paid on or before the thirty-first day of July of each year, by the Secretary of the Treasury, upon the warrant of the Secretary of the Interior, out of the Treasury of the United States, to the State or Territorial treasurer, or to such officer as shall be designated by the laws of such State or Territory to receive the same, who shall, upon the order of the trustees of the college, or the institution for colored students, immediately pay over said sums to the treasurers of the respective colleges or other institutions entitled to receive the same, and such treasurers shall be required to report to the Secretary of Agriculture and to the Secretary of the Interior, on or before the first day of September of each year, a detailed statement of the amount so received and of its disbursement. The grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purpose of said grants: *Provided*, That payments of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of legislature meeting next after the passage of this act shall be made upon the assent of the governor thereof, duly certified to the Secretary of the Treasury.

SEC. 3. That if any portion of the moneys received by the designated officer of the State or Territory for the further and more complete endowment, support, and maintenance of colleges, or of institutions for colored students, as provided in this act, shall, by any action or contingency, be diminished or lost, or be misapplied, it shall be replaced by the State or Territory to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to such State or Territory; and no portion of said moneys shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation, or repair of any building

or buildings. An annual report by the president of each of said colleges shall be made to the Secretary of Agriculture, as well as to the Secretary of the Interior, regarding the condition and progress of each college, including statistical information in relation to its receipts and expenditures, its library, the number of its students and professors, and also as to any improvements and experiments made under the direction of any experiment stations attached to said colleges, with their costs and results, and such other industrial and economical statistics as may be regarded as useful, one copy of which shall be transmitted by mail free to all other colleges further endowed under this act.

SEC. 4. That on or before the first day of July in each year, after the passage of this act, the Secretary of the Interior shall ascertain and certify to the Secretary of the Treasury as to each State and Territory whether it is entitled to receive its share of the annual appropriation for colleges, or of institutions for colored students, under this act, and the amount which thereupon each is entitled, respectively, to receive. If the Secretary of the Interior shall withhold a certificate from any State or Territory of its appropriation the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the close of the next Congress, in order that the State or Territory may, if it should so desire, appeal to Congress from the determination of the Secretary of the Interior. If the next Congress shall not direct such sum to be paid it shall be covered into the Treasury. And the Secretary of the Interior is hereby charged with the proper administration of this law.

SEC. 5. That the Secretary of the Interior shall annually report to Congress the disbursements which have been made in all the States and Territories, and also whether the appropriation of any State or Territory has been withheld, and if so, the reasons therefor.

SEC. 6. Congress may at any time amend, suspend or repeal any or all of the provisions of this act.

Approved, August 30, 1890.

REGULATIONS OF THE POST OFFICE DEPARTMENT FOR THE FREE TRANSMISSION IN THE MAILS OF THE BULLETINS AND REPORTS OF AGRICULTURAL EXPERIMENT STATIONS UNDER THE ACT OF CONGRESS OF MARCH 2, 1887.

(1) Any claimant of the privilege must apply for authority to exercise it to the Postmaster-General, stating the date of the establishment of such station, its proper name or designation, its official organization and the names of its officers, the name of the university, college, school, or institution to which it is attached, if any, the legislation of the State or Territory providing for its establishment, and any other granting it the benefits of the provision made by Congress as aforesaid (accompanied by a copy of the act or acts), and whether any other such station in the same State or Territory is considered, or claims to be, also entitled to the privilege; and also the place of its location and the name of the post office where the bulletins and reports will be mailed. The application must be signed by the officer in charge of the station.

(2) If such application be allowed after examination by the Department, the postmaster of the proper office will be instructed to admit such bulletins and reports to the mails in compliance with these regulations, and the officer in charge of the station will be notified thereof.

(3) Paragraph 3, section 419, Postal Laws and Regulations, 1887, is hereby amended so as to read as follows:

“Only such bulletins or reports as shall have been issued after the station became entitled to the benefits of the act can be transmitted free, and such bulletins or reports may be inclosed in envelopes or wrappers, sealed or unsealed. On the exterior of every envelope, wrapper, or package must be written or printed the name of the station and place of its location, the designation of the inclosed bulletin or report, and the word ‘Free’ over the signature or fac simile thereof of the officer in charge of the station, to be affixed by himself, or by some one duly deputed by him for that purpose. There may also be written or printed upon the envelope or wrapper a request that the postmaster at the office of delivery will notify the mailing station of the change of address of the addressee, or other reason for inability to deliver the same, and upon a bulk package a request to the postmaster to open and distribute the ‘franked’ matter therein, in accordance with the address thereon.

“Bulletins published by the U. S. Department of Agriculture and analagous to those of the station, and entitled to be mailed free under the penalty envelope of that Department, may also be adopted and mailed by the several stations, with their own publications, under the same regulations, and any bulletins or reports mailable free by any agricultural experiment station under these regulations may be so mailed by any other station having free mailing authority.

“If such station’s annual reports be printed by State authority, and consist in part of matter relating to the land grant college to which such station is attached, then said report may be mailed free entire by the director of the station; provided, in his judgment, the whole consists of useful information of an agricultural character.”

The Post Office Department has recently ruled that “in sending out bulletins from an agricultural experiment station it is permissible to inclose postal cards to enable correspondents of the station to acknowledge the receipt of its publications and to request their continuous transmission.”

(4) The bulletins may be mailed to the stations, newspapers, or persons to whom they are by the foregoing act authorized to be sent, and the annual reports to any address within the United States.

## INDEX OF NAMES OF STATION OFFICERS.

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In the following index a short biographical sketch of each station worker is given, including (1) the degrees, (2) place and date of graduation, (3) post-graduate courses, and (4) scientific positions held since graduation. A note explanatory of abbreviations is given on pp. 9, 10.

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(2) Experiment Station Bulletins, Miscellaneous Bulletins, and the Experiment Station Record, which are more or less technical. It is the practice to send to persons applying for them one or more numbers, from which they may judge of their usefulness, but not to place any names upon the mailing list until after receipt of applications on special blanks furnished by the Office.

The following bulletins have been issued: -

*Farmers' Bulletins.*—No. 1, The What and Why of Agricultural Experiment Stations; No. 2, Illustrations of the Work of the Stations.

*Experiment Station Bulletins.*—No. 1, Organization and History of the Stations; No. 2, Digest of Annual Reports of the Stations for 1888, in two parts; No. 3, Report of Meeting of Horticulturists at Columbus, Ohio, June, 1889; No. 4, List of Station Horticulturists and Outline of their Work; No. 5, Organization Lists of Stations and Colleges, March, 1890; No. 6, List of Station Botanists and Outline of their Work; No. 7, Proceedings of the Fifth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., August, 1891; No. 10, Meteorological Work for Agricultural Institutions.

*Miscellaneous Bulletins.*—No. 1, Proceedings of Knoxville Convention of Association of Agricultural Colleges and Stations, January, 1889; No. 2, Proceedings of Washington Convention of the Association, November, 1889; No. 3, Proceedings of Champaign Convention of the Association, November, 1890.

*The Experiment Station Record*, vol. I, 6 numbers; vol. II, 12 numbers; vol. III, Nos. 1-10. Copies of the station and Department publications abstracted in the Record can, in many instances, be obtained on application.

Communications intended for this Office should be addressed to the SECRETARY OF AGRICULTURE, for the *Office of Experiment Stations, Department of Agriculture, Washington, D. C.*

